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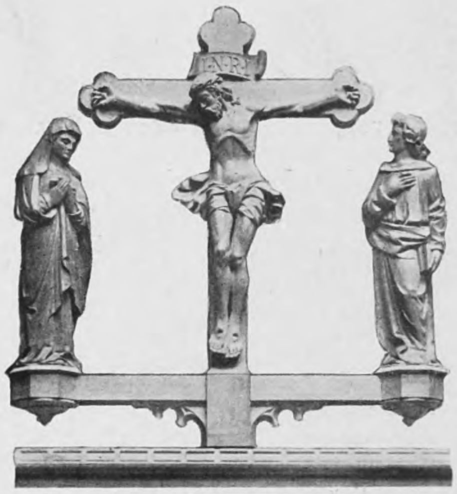

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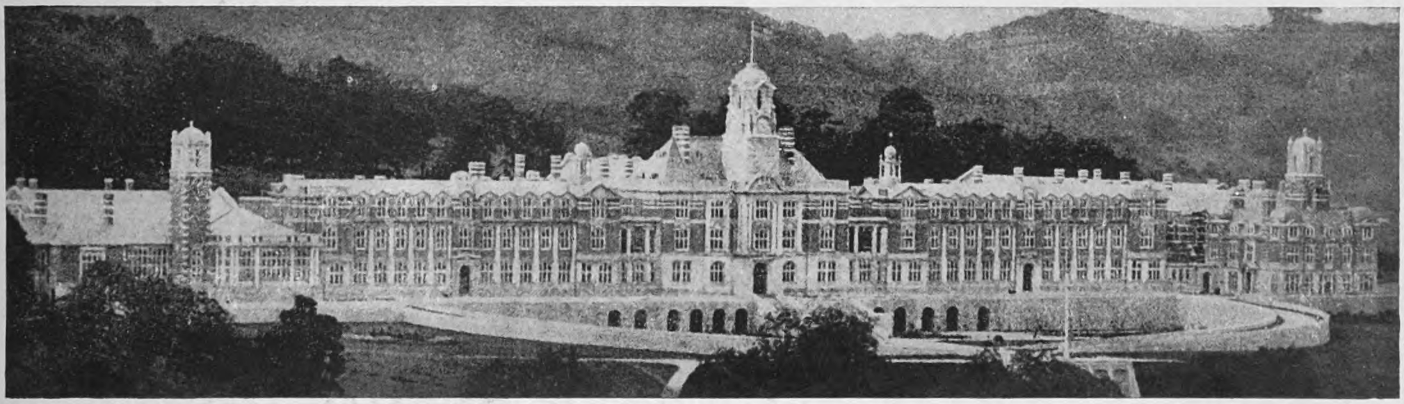

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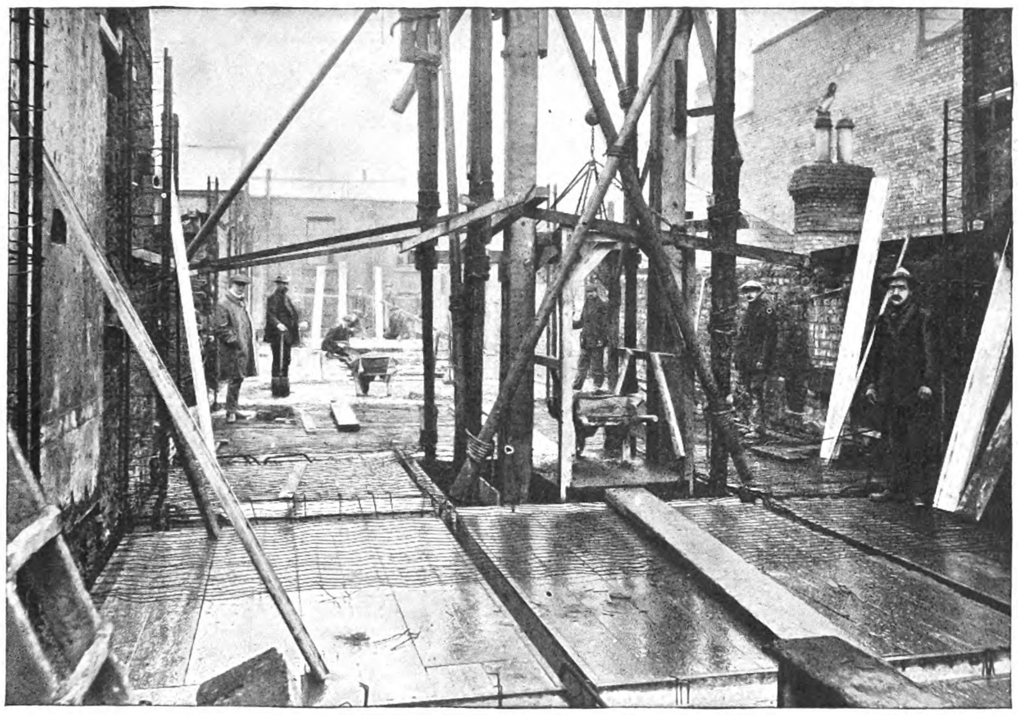

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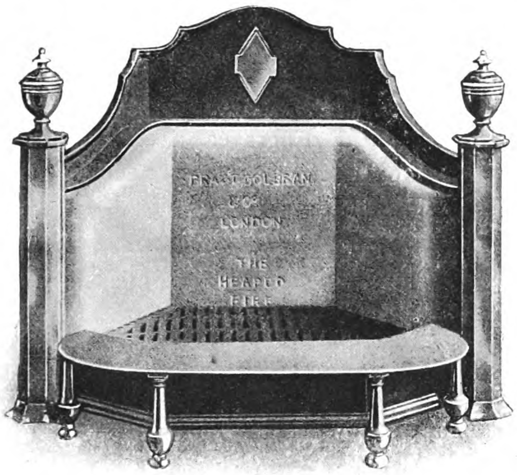

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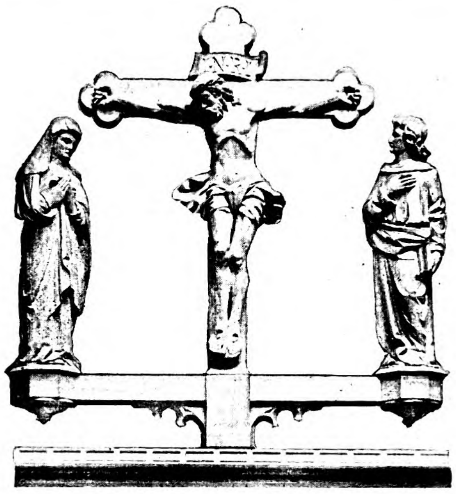

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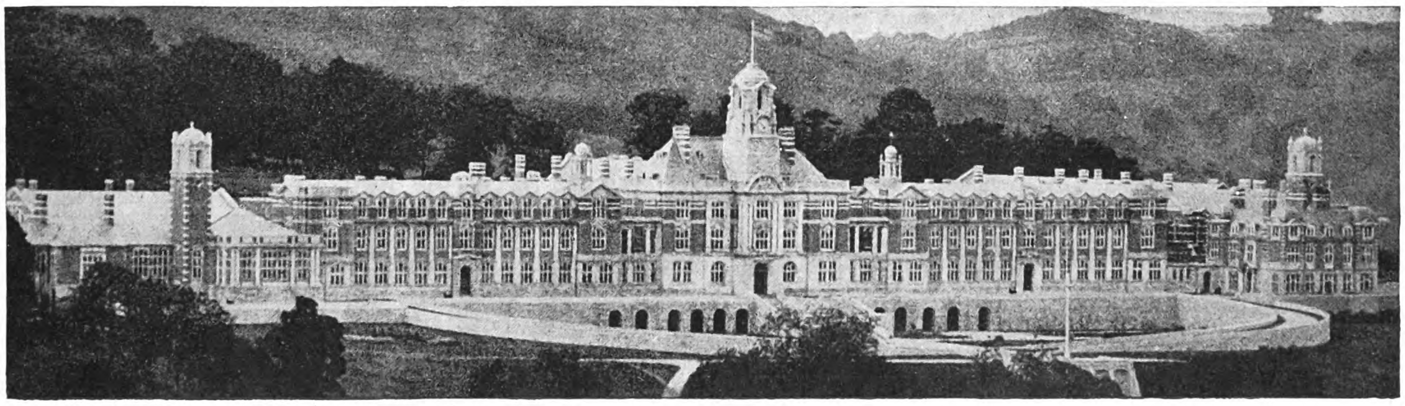

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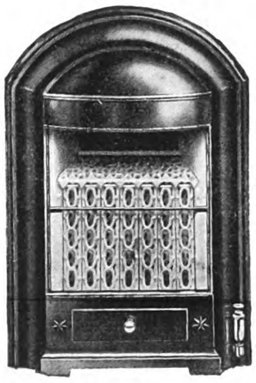

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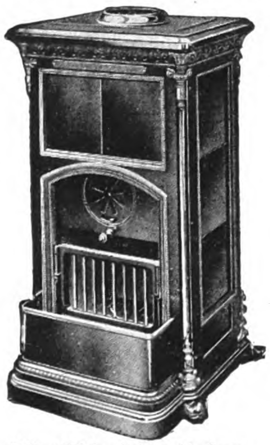

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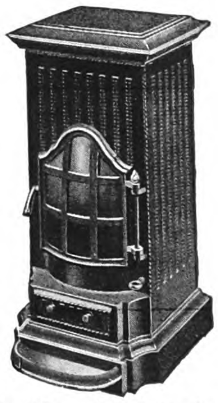

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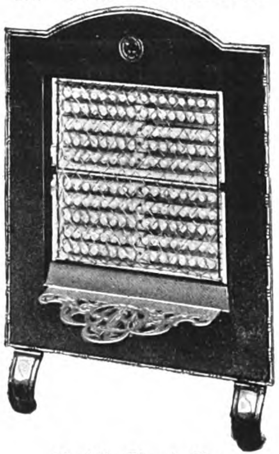

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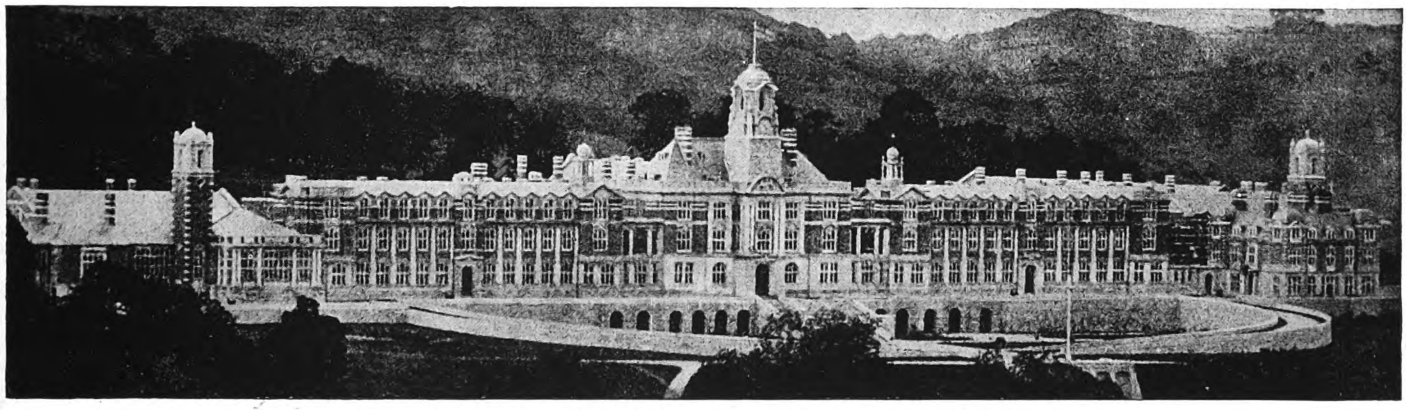

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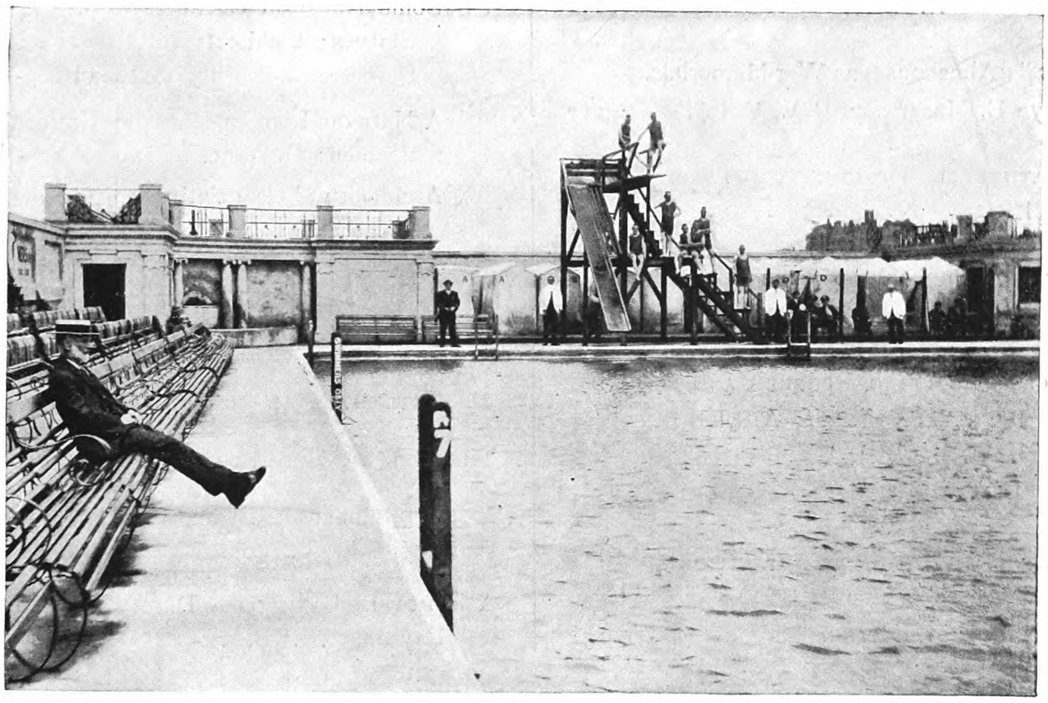

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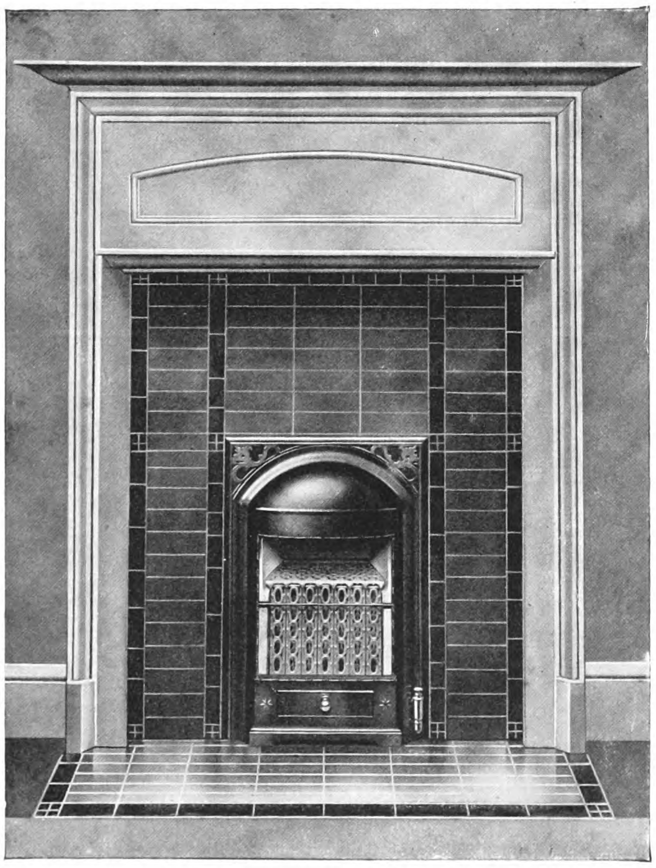

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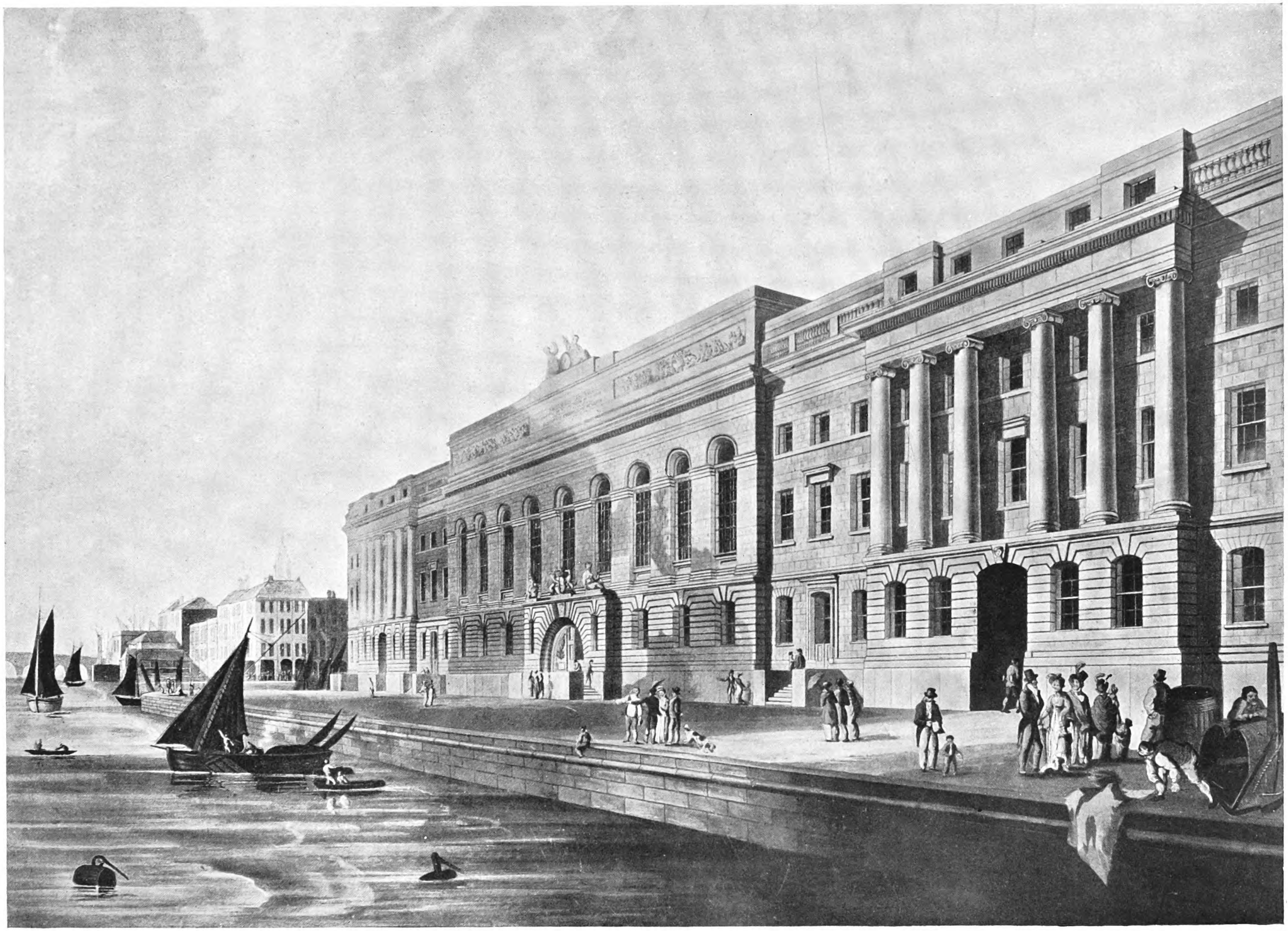


Plate I. July 1917.

SOUTH VIEW OF THE CUSTOM-HOUSE, LONDON, IN 1817, AS ORIGINALLY DESIGNED BY DAVID LAING.

From an Aquatint by J. C. Stadler.

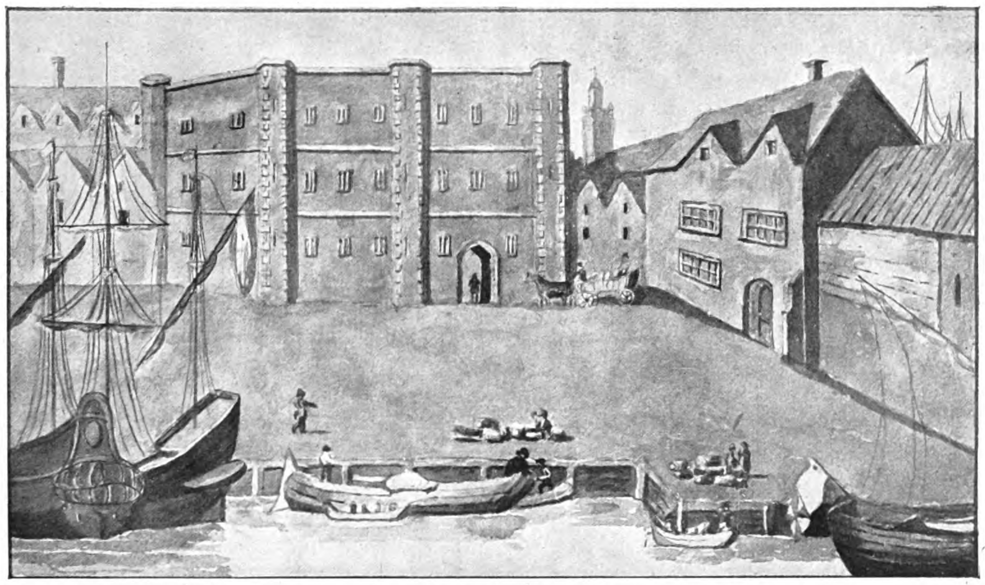
THE CUSTOM-HOUSE, LONDON.

By ARTHUR STRATTON, F.R.I.B.A.

THE reputation of more than one architect has been made or marred by the measure of skill he has evinced in handling the design and construction of a custom-house. From the nature of the problem it is one that tests his powers to the uttermost. Without breadth of vision and a grasp of the principles governing the disposition of masses he will fail to impart a certain austerity which is expressive of the uses to which such a building is put, and without sound constructive ability he will be likely to be caught in one of the pitfalls which make the erection of buildings on sites adjacent to waterways more than ordinarily difficult.

The usual position for a custom-house is on a quay beside a busy waterway, and its uses and situation are such that it can hardly fail to be seen by travellers and foreigners. It is associated with shipping and merchandise, with dues and tolls, and, in days gone by, with the bustling throng of travellers from many parts who passed through its portals on arrival and departure. Modern conditions have in some respects robbed it of its more picturesque associations, but there is no better index to the present or past prosperity of a port than the magnitude and character of its custom-house; in it will be reflected the high-water mark of architectural thought current at the period of its erection. A well-designed and well-placed custom-house impresses the traveller at first glance with the wealth and dignity of a port, and is, moreover, a symbol of its commercial relations with countries in various parts of the globe. Fortunately, the period of prosperity which many British maritime cities enjoyed in the latter half of the eighteenth century, as a result of the expansion of overseas trade, coincided with a period of high architectural achievement. It was reflected in the monumental qualities of the design for the custom-house erected in more than one capital city.

The century which separates Henry Bell's delightful custom-house at King's Lynn—possessing, as it does, many of the attributes of the design of an Exchange—from James Gandon's stately building beside the Liffey at Dublin saw a marked development in architectural expression; but both these buildings were the outcome of the conditions under which they were built, and both are masterpieces, albeit of very different types. Henry Bell and James Gandon are more widely known for their successes on the quay-sides of their respective towns than for anything else they achieved. Every traveller recognizes their skill—the eye can appreciate their handiwork, though the ear has never heard their names.



VIEW OF ORIGINAL CUSTOM-HOUSE.

From a Water-colour Drawing in the Fauntleroy-Pennant Collection in Sir John Soane's Museum

The Custom-house standing to-day beside the Thames is the last of a succession of buildings dating from early times and erected to meet the requirements of the Port of London. Records do not seem to substantiate the existence of a separate building for this purpose earlier than the reign of Richard II, when a certain John le Chircheman, mercer and Sheriff of London, "for the quiet of merchants"—that is to say, to prevent disputes about weight—built a house upon a quay called Woolewharf in the Tower Ward. As Maitland says, "though the Antiquity of the Duties of Import and Export in this City cannot be ascertain'd, yet that they are almost coeval with the commerce thereof, I think will not be controverted." * Doubtless a wharf for shipping wool and other commodities was established from the earliest time when merchandise was subject to customs. In very early times we had trade with France, for mention is made of ships from Rouen which brought cargoes of wine and freed them from toll, i.e. paid their duties. In those early days the amount brought in by customs was absurdly small. The present system of collecting duties seems to date from the first years of the reign of Elizabeth, and Stow refers to Wool Wharfe or Customer's Quay, which "is now of late most beautifully enlarged and built." About 1559 the loss to the revenue from an imperfectly organized system of collecting dues was first realized, and an Act was passed to compel people to land their goods in such places as were appointed by the Commissioners, and this was the spot chosen.* If this first serious attempt to provide London with a building especially erected for the purpose may be judged from the accompanying illustration (page 1), it was neither very large nor expressive of its purpose; but it seems to have sufficed, in spite of the yearly increase in foreign trade, till destroyed in the Great Fire of 1666. By that time the trade of the country had increased enormously; a fine site facing the river to the west of the Tower of London was made available, and Sir Christopher Wren was entrusted with the erection of an entirely new structure.

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* William Maitland, "History of London," 1739.

In his plan for rebuilding London, Wren isolated the Custom-house and made it a focal point for one of his main streets from the Royal Exchange, showing that he realized the importance of such a building, and the part that it should play in the general scheme of the city. Frustrated in the realization of his fine conception, he developed the south or river front by throwing wings well forward at the east and west ends of a long block, the central three bays of which were slightly projected and surmounted by a pediment. From the view of this building reproduced on Plate II, it is evident that it was a good example of the "Wren manner," and without doubt it was a building that looked far more impressive in reality than in any contemporary engraving. Such obvious defects as the top-heavy appearance of the central pediment and the stunted proportion of the lower story may be safely attributed to shortcomings on the part of the engraver. A vivid word picture of it is preserved in an English traveller's description † :—"This office is a Noble Pile of Buildings, built on the River Side below the Bridge, to whose Kay Ships of the greatest Burthen come up. The necessary Offices of the several Branches of this extensive Revenue are disposed in this great Building with the greatest Regularity and Order imaginable. Here is no Confusion, notwithstanding the Vast Affluence of People that come every Day to make the Reports and the Entries of Ships Outward and Inward Bound; and in the Long Room it's a pretty Pleasure to see the Multitude of Payments that are made there in a Morning." This building did not have a long life, for fire has wrought nearly as much havoc with London's Custom-house as with some of her theatres. On 13 January 1714, Wren's building and some hundred and twenty houses adjoining it in Thames Street were burnt to the ground; but no time was lost in setting about the erection of another building, seeing that such a large revenue-collecting office necessitated adequate accommodation.

The architect chosen for the new building was Thomas Ripley, one of the least distinguished of Wren's followers, though one who was held much in favour in official circles. His building stood for almost exactly a hundred years, and from careful drawings, made before another devastating fire swept the site clear in 1814, it is possible to obtain a very good idea of its architectural character. It will be seen from the exterior view reproduced on Plate II, and the interior reproduced on page 3, that Ripley was content to follow his master's lead as regards the main disposition of a long central block with deep projecting wings, the principal departures from Wren's building being occasioned by the need for additional office and warehouse accommodation. It was a brick and stone building about 190 ft. long with attached orders on the river front, Tuscan below and Ionic above, the central pediment rising in front of a lofty attic story. The increase in mass, as compared with that of the building it replaced, might in some hands have produced a corresponding increase in grandeur of effect. Ripley was too commonplace in his ideas to achieve this, or to shake himself free from the trivialities of the everyday conventions of his time. Pleasing though his river front may have been with a motley crowd on the quay and shipping moored beside it, there was lacking that particular note which characterizes the successful Custom-house and prevents any likelihood of its being mistaken for anything else.

Ralph must have felt this when he wrote: "I could have wished . . . that this building had been more costly and magnificent; it would make a seasonable impression on foreigners, even at their landing, of the majesty and wealth of the British nation; to which let me add that its situation, by the water-side, gives it a still further claim to grandeur and decoration, and 'tis pity so publick a building should want what is so remarkably mist."* But the principal room on the first floor, known as the "Long-room," impressed every one as much on account of its dimensions as of the scenes for which it made such an excellent setting. It was the whole length of the main block, lighted by a row of nine lofty semicircular-headed windows on the river front, and covered by a flat ceiling, in the centre of which an octagonal opening marked the position of the turret which was a feature of the exterior. Here were offices partitioned off for the commissioners and officers, and it was the usual place of sale by auction for contraband and other goods. Owing to the constantly increasing revenue derived from foreign trade during the eighteenth century, and the inadequacy of the accommodation provided in Ripley's building, it had been decided, several years before fire turned it into a heap of ruins, to abandon it and to build entirely anew on another site.

The new site, immediately east of Billingsgate Dock, and consequently a few hundred yards westward of the old one, is commanding, and offered fine opportunity for architectural display, especially on the river frontage. David Laing, a pupil of Sir John Soane, realized this, and, had not an unfortunate accident wrecked his reputation, he would for all time have stood foremost amongst the great architects of the early nineteenth century. As it is, nothing can detract from his merit as a designer and his grasp of the principles which govern the setting-out of a great public building. His design for the river front of the new Custom-house embodies all the attributes that such a building in the capital of a great maritime power should possess; but it is known to-day, as originally erected, only from drawings published in his large folio,† or from sketches made before the catastrophe happened. The beautiful aquatint by J. C. Stadler (Frontispiece) records sufficiently well the magnificent grouping of this great façade, on which architect and sculptor combined in perfect unison to supplement the work of each other; while the general view by T. G. Roberts, reproduced on Plate III, shows the building as a whole in relation to the waterway and its immediate surroundings.

In 1810 Laing obtained the appointment of Architect and Surveyor of Buildings to the Board of Customs, and his final design received the approval of the Lords of the Treasury in

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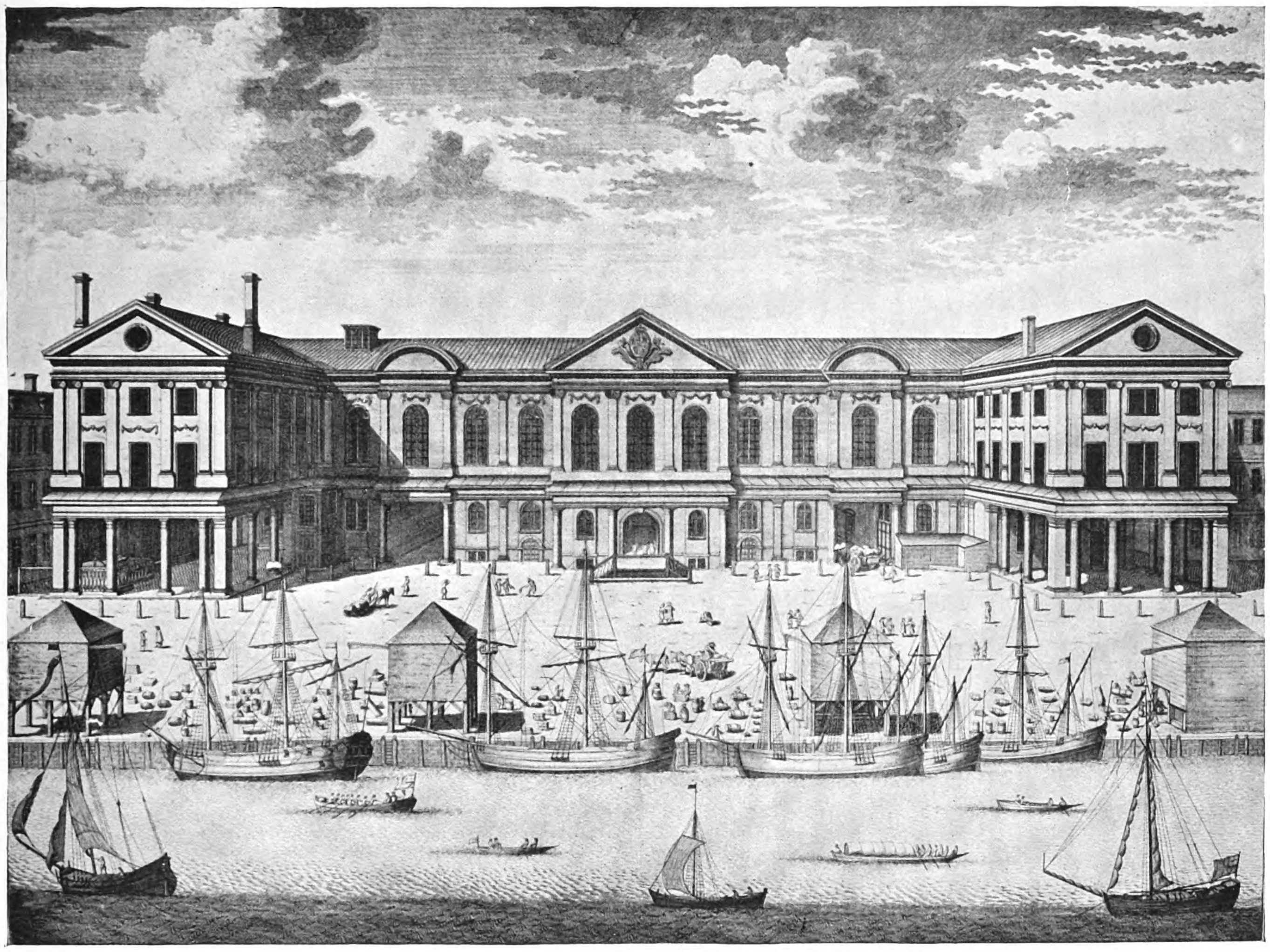
* Thomas Pennant, "Some Account of London," 1793.

† John Macky. "A Journey through England," 1714.

* James Ralph. "A Critical Review of the Public Buildings, Statues, and Ornaments in and about London and Westminster," 1734.

† David Laing, F.S.A. Plans, Elevations, and Sections of Buildings, Public and Private, executed in various parts of England, including the New Custom-House. London. 1818.



VIEW OF SIR CHRISTOPHER WREN'S CUSTOM-HOUSE IN 1714.

From an Engraving by John Harris.

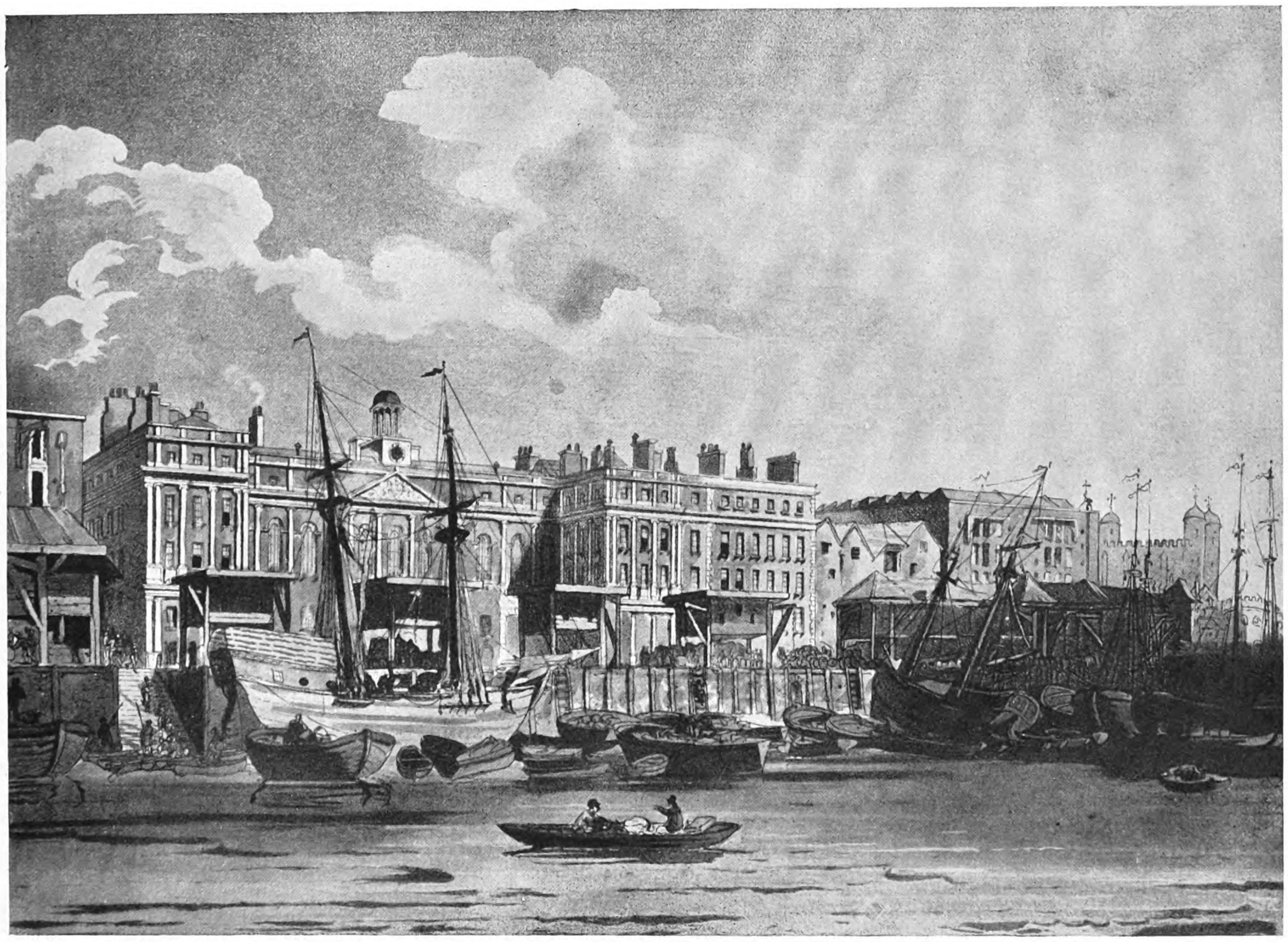
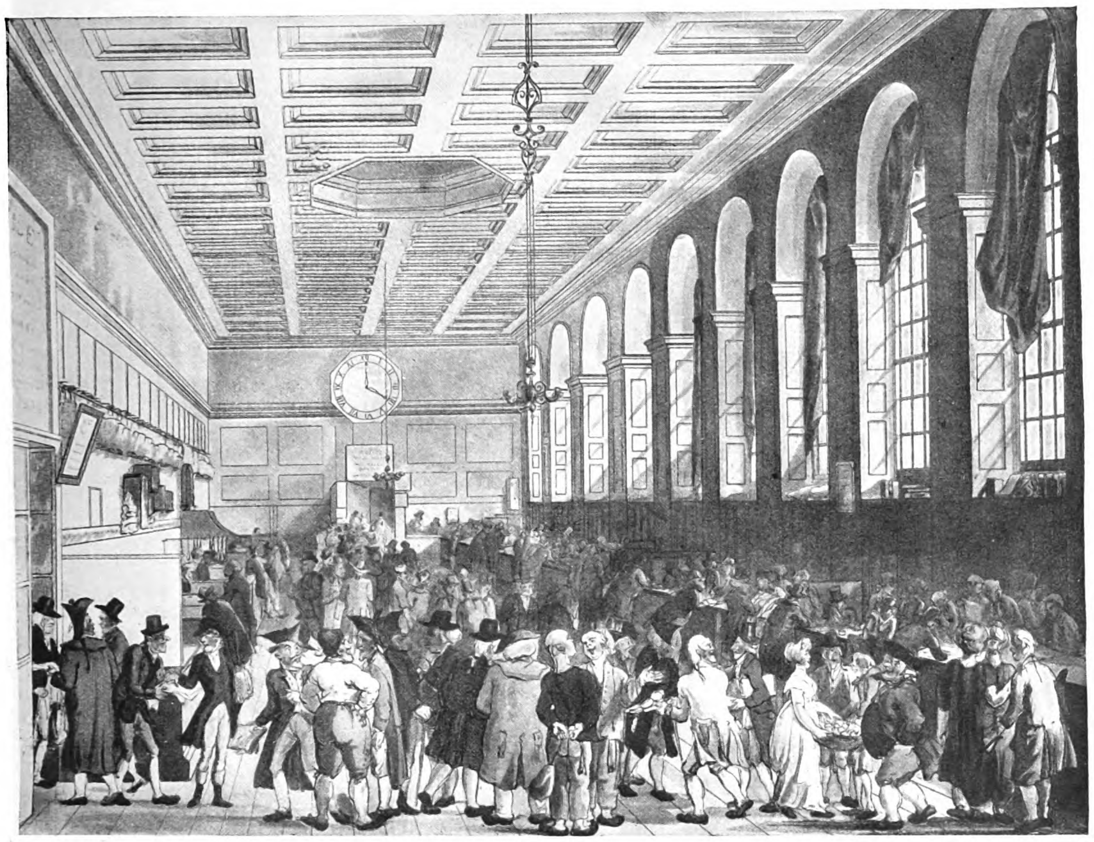


Plate II.

VIEW OF THE CUSTOM-HOUSE AS REBUILT BY THOMAS RIPLEY.

From an Aquatint by J. Bluck.

July 1917.



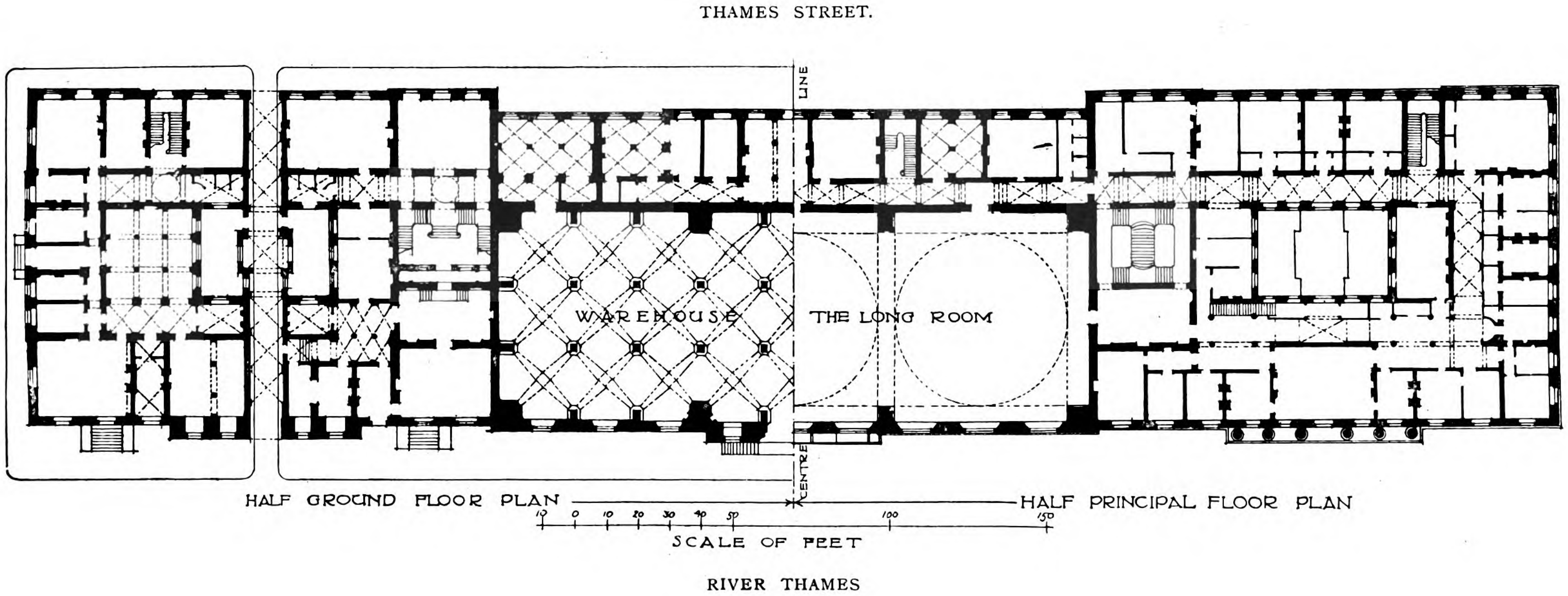
THE "LONG-ROOM" IN THE CUSTOM-HOUSE AS REBUILT BY THOMAS RIPLEY.

From an Aquatint by J. C. Stadler.

May 1812. The site was at that time lying waste, in consequence of a fire which had consumed several extensive warehouses a few years earlier. Hasty building on such a site was peculiarly ill-advised; but the first stone was laid in the autumn of 1813, and the official opening took place on 12 May 1817.

The great dimensions of the new Custom-house—no less than 488 ft. long, or some thirty feet more than the National Gallery—point to the growth of the revenue from this source. Nothing was spared to make it worthy of the capital. Portland stone was selected for the front, and with an astylar treatment for the central mass, flanked by appendages the centres of which were emphasized by means of detached orders of columns, Laing knew how to get the most out of it by extremely simple means. The plan (see below) shows the straightforward solution of the problem and the great breadth of parts, varied only by slight breaks and projections. In this respect it is in marked contrast to its predecessors. The north front is especially plain and simple; but considering the uses of the building and the narrowness of Thames Street, from which alone it can be seen, it is eminently suitable. Laing wrote: "I have endeavoured to obtain by continuity of outline and great breadth of parts a bold and imposing façade." The excellence of materials and workmanship in the brickwork presents a surface that harmonizes perfectly with the stone in which the entablature and string-courses are carried round, and the perspective foreshortening of this great mass brings about some of the most striking effects to be found in any brick and stone façade in London (page 4). The same principles guided the composition of the east and west fronts, but they are of stone throughout.

It was on the river front that sculpture was most appropriate; the slight projection of the centre part up to the principal floor level allowed of the royal arms over the main entrance, flanked by recumbent figures of Ocean and Commerce. The sculptor, Bubb, continued the allegory in a frieze about six feet in depth and two hundred feet in length along the principal attic, in which he represented on the western half the commercial alliances of Great Britain, and on the eastern half those arts and sciences which may be regarded as indispensable to the prosperity of an insular power. Above this, seen clear against the

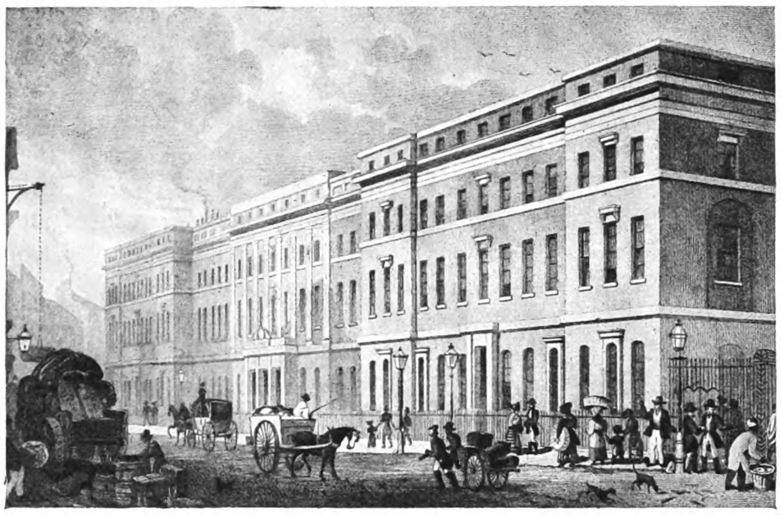


THE CUSTOM-HOUSE, LONDON: PLANS OF DAVID LAING'S BUILDING.

sky, were figures of Industry and Plenty supporting a large circular dial.

No precautions were spared to protect the fabric from fire, and two stories of vaults formed with an extensive series of stone and granite piers carrying brick arches were provided beneath the principal floor. The traditional "Long Room" was approximately 195 ft. long and 66 ft. wide—probably the largest apartment of its kind in Europe. Divided in its length into three square bays by means of large piers carrying segmental arches, the domical system was complete, the central saucer dome rising to a height of about fifty-five feet above the stone-paved floor. This impressive apartment was lighted, as in Ripley's building, by a range of nine great semicircular-headed windows on the river front, and the plans (page 3) show the approaches by means of staircases at either end so as to avoid possible congestion from crowds mounting and descending a single central staircase.

Within a few years of completion, serious signs of failure began to show themselves beneath the "Long-room," occasioned not by defective design or workmanship in the structure itself, but by defective arrangements in the preparation of the foundations—the site was a confused mass of old walls, sewers, ancient quays, and rubbish, the débris of numerous works that had been formed there in successive ages. It was through and amongst this chaos that a foundation of wood piles was unwisely driven.* Each pier stood, or was intended to stand, upon nine whole-timber piles, forming a square covered with planking. Through careless setting-out, which was not detected at the time, the centre line of one of these groups of piles was mistaken for a boundary line, with the result that half of one of the piers was built without any solid foundation at all. The inevitable settlement of this pier was followed by the failure of those adjoining it, and in 1825 Laing suffered the humility of seeing Sir Robert Smirke called in to save a monument which should have crowned his career with honours instead of bringing it to an untimely end. Smirke remodelled the central block, adding the range of Ionic columns with which one is familiar to-day; these stand well forward on a rusticated basement, and the crowning balustrade returns against the main attic. Secondary breaks introduced at either end of the central mass with pilasters at the angles interrupt the horizontal lines of the appendages, which Laing had been careful to carry through. The whole of the sculptures were swept away, and a high attic pierced with windows took the place of the original crowning feature. A bold design was robbed of half its power by these changes. Why Smirke was not content to consolidate the structure and leave Laing's façade unaltered is not clear, neither is it evident why he was permitted to tamper with one of the finest frontispieces of the kind in Europe. A comparison of the photograph of the river front as existing (Plate III) with the reproduction of Stadler's aquatint (Frontispiece) makes it clear that these alterations have detracted very considerably from the architectural qualities of the building. Most critics have agreed on this point from the day the changes were made visible. Britton and Pugin in 1827 wrote: "However sound and scientific may be the present design, we cannot approve of the substitution of two series of sash windows for the lofty arched ones that before occupied the centre, and which in fact gave it almost all the character it possessed."



THE NORTH FRONT OF THE CUSTOM-HOUSE, FACING THAMES STREET.

From an Engraving by T. H. Shepherd.

Laing's retirement following the collapse of his *chef d'œuvre* is one of the most pathetic incidents that the biographer of modern architects has to chronicle. Little did he suspect that danger was lurking underground when, at the height of his fame, he published his scholarly account of the building in 1818. It is not as though he were a dreamy idealist: on the contrary, he was fully alive to the urgency of giving attention to every practical aspect of his problem, and was careful to include in his preface "such observations as naturally arose from the difficulties of execution; which could be discovered and ascertained only as the undertaking proceeded in its various parts." Such observations, he wrote, "may be of use to artists engaged on the construction of massy and elevated edifices; they may forewarn the judicious of embarrassments not always adequately contemplated and never willingly anticipated." But if by falling a victim to "embarrassments," against which he was so anxious to safeguard others, he lost his reputation as a "practical" man, it can never be urged that he failed as a designer; and while the practical side of architecture demands the efficient combination of dexterity, intelligence, and experience, it is equally vital to success to remember that the foundations of the art must be laid on accurate and well-studied theory. Laing put into practice what he preached, and the lessons to be learned from a study of his masterpiece are amongst the greatest that the architect is called upon to learn.

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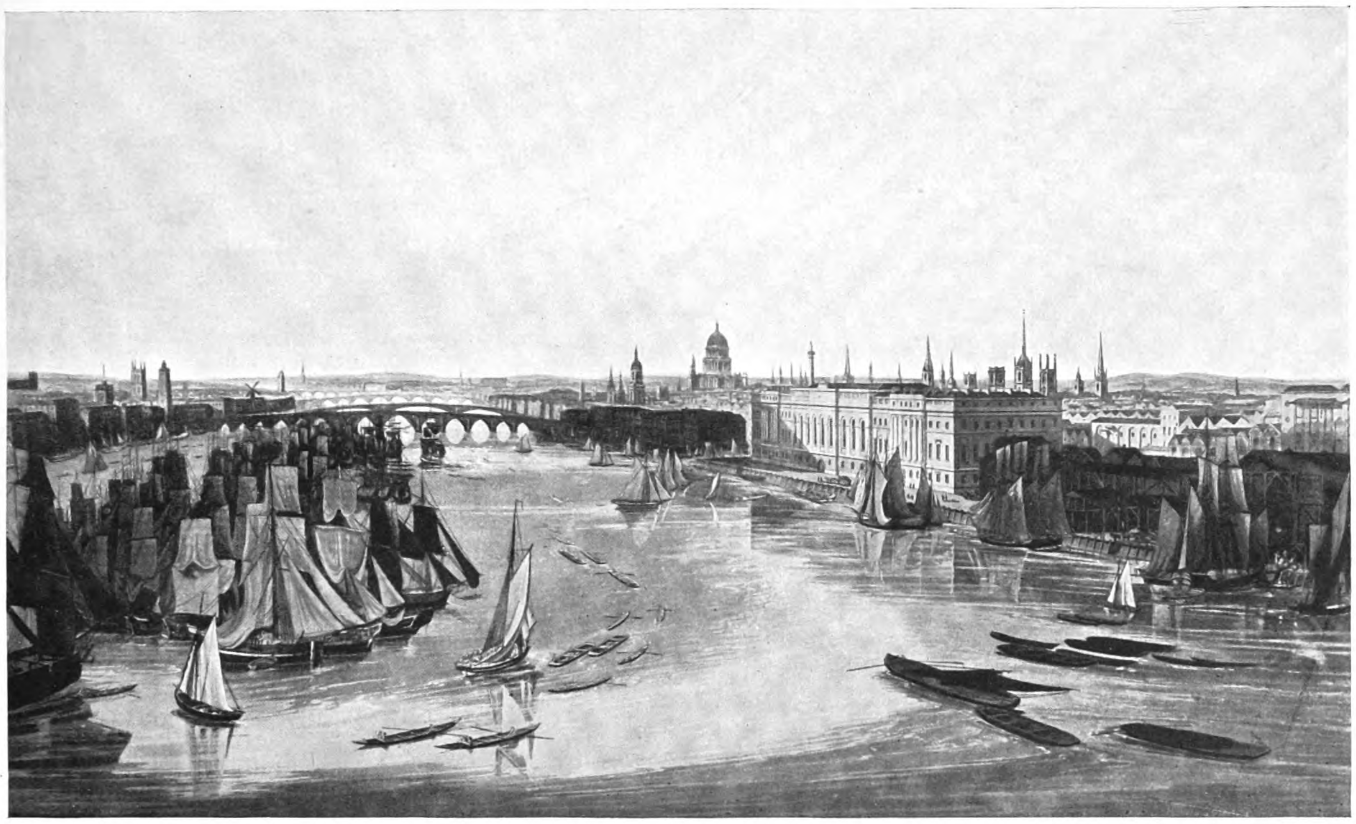
* Paper by Edwin Nash in the Transactions of the R.I.B.A., 1867.



GENERAL VIEW SHOWING LAING'S CUSTOM-HOUSE IN 1816.

From an Aquatint by T. G. Roberts

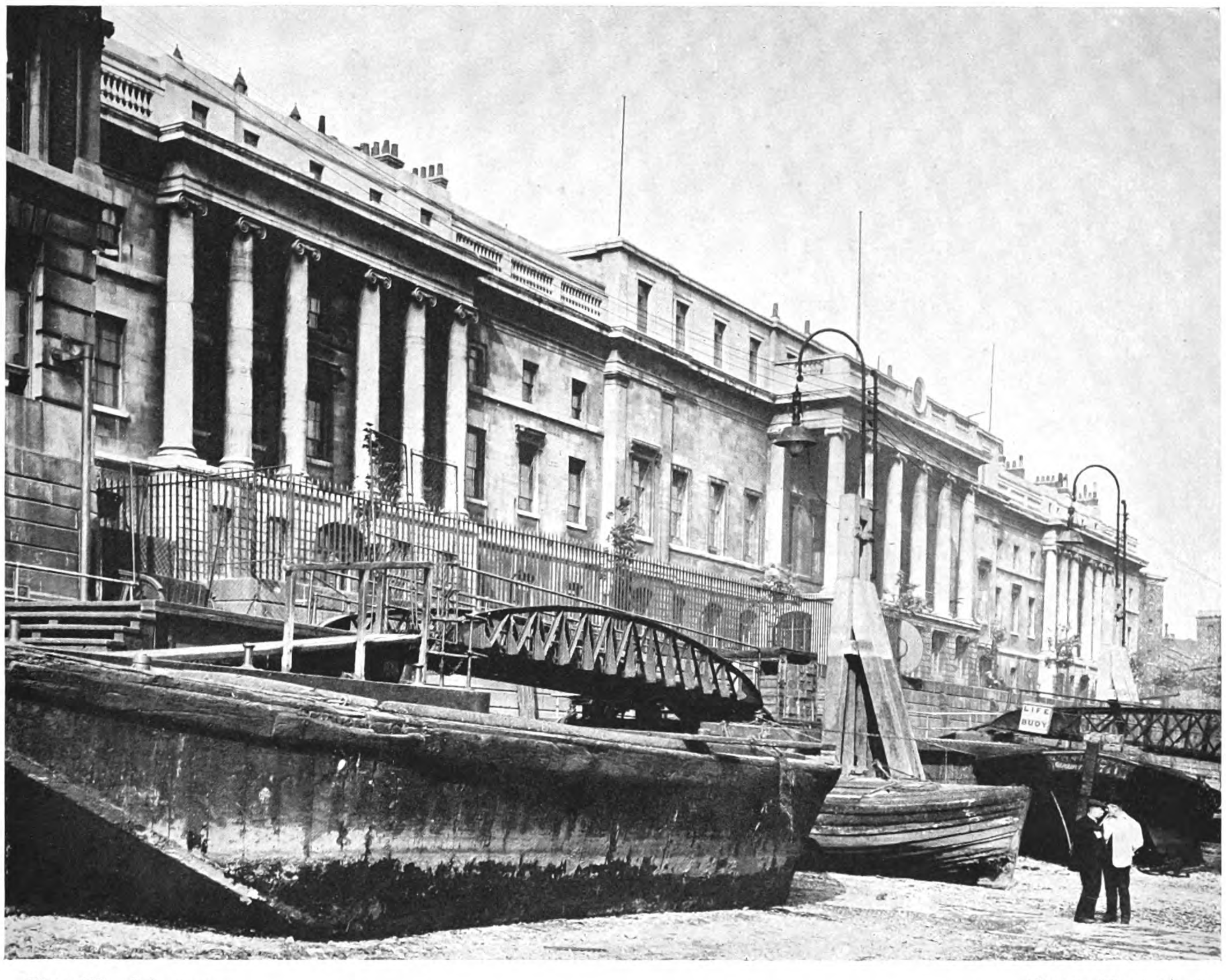


Plate III. July 1917. Photo: Photochrom.

SOUTH VIEW OF THE CUSTOM-HOUSE AT THE PRESENT DAY AS REMODELLED BY SIR ROBERT SMIRKE, CIRCA 1825.

HENRI PAUL NÉNOT, ROYAL GOLD MEDALLIST, 1917.

M. HENRI PAUL NÉNOT, the recipient of this year's Royal Gold Medal, is the twelfth representative of France to win the distinction; the others being—J. I. Hittorff, 1855; J. B. Lesueur, 1861; E. Viollet-le-Duc, 1864; Charles Texier, 1867; Joseph Louis Duc, 1876; the Marquis de Vogüé, 1879; Charles Garnier, 1886; César Daly, 1892; Auguste Choisy, 1904; Honoré Daumet, 1908; Jean Louis Pascal, 1914. On the day of the presentation M. Nénot was unfortunately indisposed, and the medal was received on his behalf by M. Adrien Thierry, Secretary of the French Embassy.

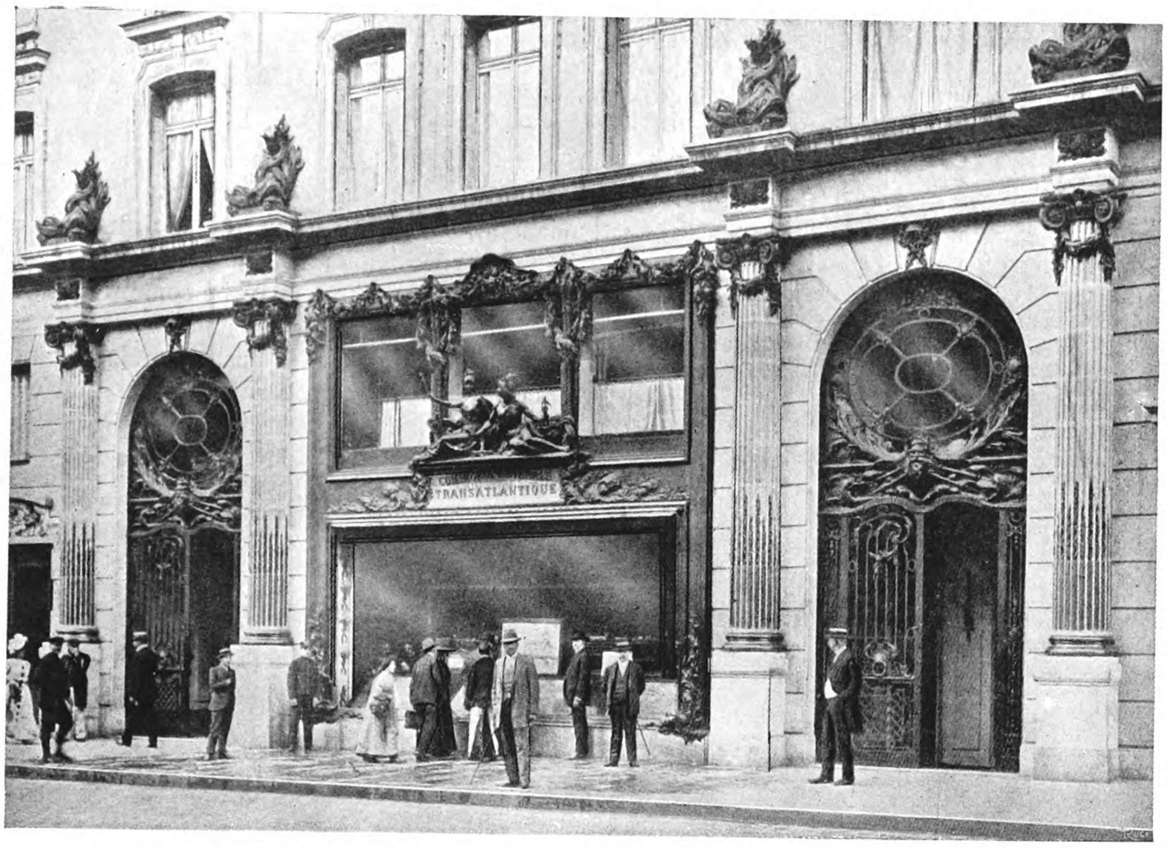
Nénot

In making the presentation, Mr. Ernest Newton, A.R.A., P.R.I.B.A., said:

"It is my privilege, as President of the Royal Institute of British Architects, and thus representing the architects of the United Kingdom, to present to M. Henri Paul Nénot the Royal Gold Medal for Architecture given by His Majesty the King.

"It is customary on these occasions to give an outline of the career of the recipient of this medal, and although most of us know M. Nénot's history, there may be some to whom his interesting and strenuous career is not so familiar.

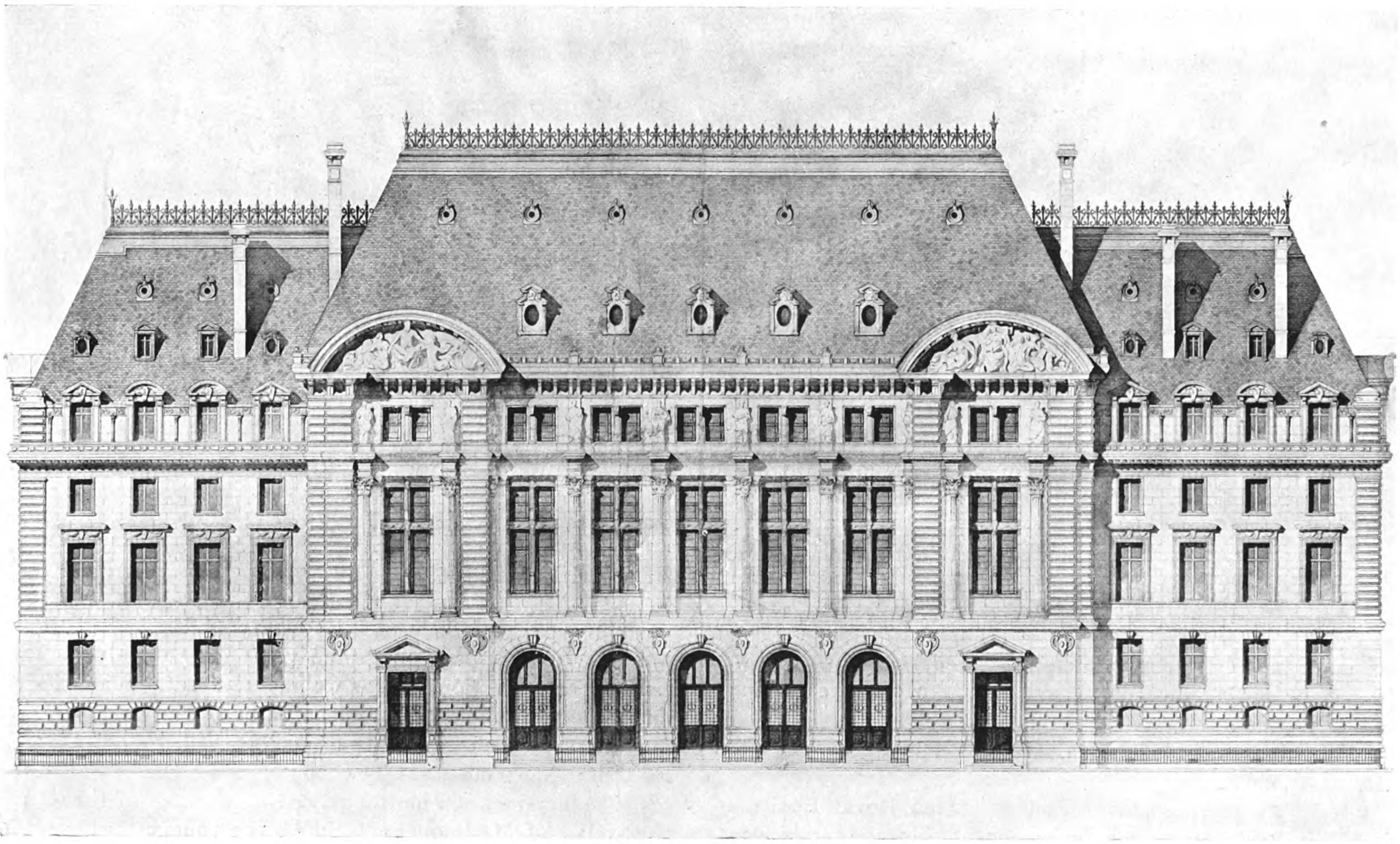
"It is not often that a taste for the austere and difficult art of architecture manifests itself at a very early age; but we find M. Nénot, when only nine years old, already showing a marked predilection, not, as we might expect, for its external and more naturally attractive aspects, but by making a detailed and accurate plan of the 'pension' at Villiers-le-Bel. Fortunately, this tendency was encouraged by those responsible for his education, and he was placed at the age of thirteen in the atelier of M. Lequeux. Surely the youngest architecture pupil on record! At fifteen he entered the École des Beaux-



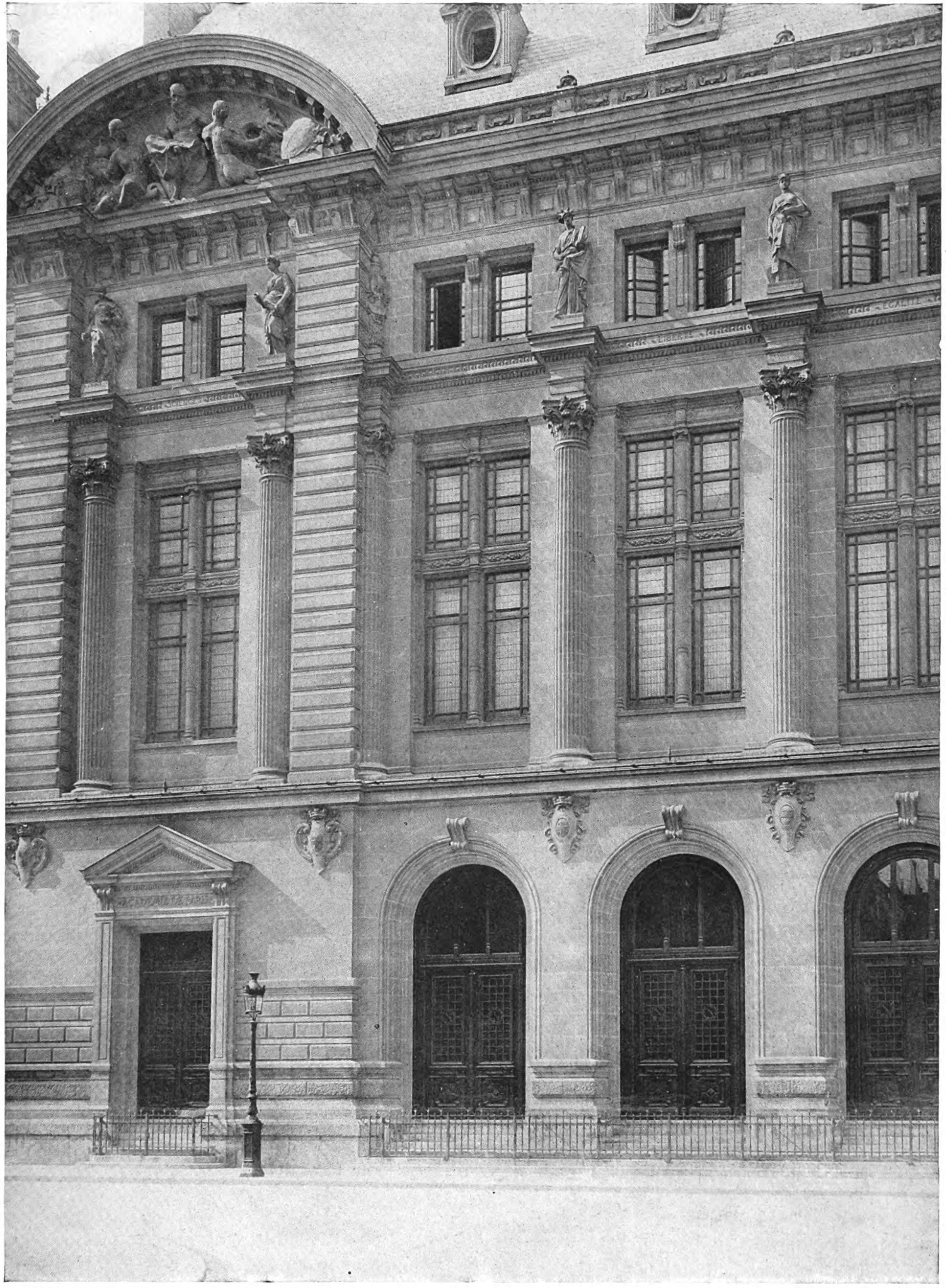
SHOP-FRONT TO PREMISES OF THE COMPAGNIE GÉNÉRALE TRANSATLANTIQUE, RUE AUBER, PARIS.

Arts. His studies were abruptly interrupted in 1870, when, immediately on the outbreak of war, he enlisted, fought valiantly, and received, as his first decoration, the Military Medal. After the war he served his term in the artillery, and so great was his patriotism that it required all the persuasion of his former masters to prevent him from re-engaging in the army, and to bring him back in the paths of architecture and a resumption of his studies at the École des Beaux-Arts. Here he continued to work until 1877, when, at the age of twenty-four, he gained the Grand Prix de Rome. During these years M. Nénot worked in the atelier of M. de Questel and in the office of Charles Garnier, competed in collaboration with M. Oudiné for some important buildings in Belgium, won the competition, and was entrusted with the execution of the work.

"Many of us would think that after these strenuous years of study, crowned by the Grand Prix, M. Nénot might have considered himself fully equipped to settle down to the practice of architecture; but he wisely looked on all these years of work as preliminary, and, being persuaded that it was only by a profound study of the ancient masterpieces of architecture that a complete mastery of his art was to be gained, he visited in turn the principal towns of Italy and Greece, as well as Constantinople and Jerusalem,



THE SORBONNE, PARIS: FAÇADE TO RUE DES ÉCOLES.



THE SORBONNE, PARIS: DETAIL OF FAÇADE TO RUE DES ÉCOLES.

Henri Paul Nénot, Architect.

and finished his tour of study by a visit to Egypt. During his last year at the Villa Medici, M. Nénot competed amongst 240 architects for the National Monument at Rome to King Victor Emmanuel, being impelled to compete by the laughing taunt of a very young architect that Italian architects were certainly superior to all foreigners. The prize of 50,000 francs was awarded to him, but the execution of the work was entrusted to an Italian.

" M. Nénot then undertook a tour of study in France and a critical and careful examination of buildings designed for every purpose, and with all these years of careful preparation behind him, and equipped with this well-digested knowledge, he entered for the great competition for the rebuilding of the Sorbonne, won it, and after some hesitation on account of his age, he being then only twenty-nine, the execution of the work was placed in his hands, but was not begun until after he had visited the Universities of Germany, Austria, Belgium, and Holland.

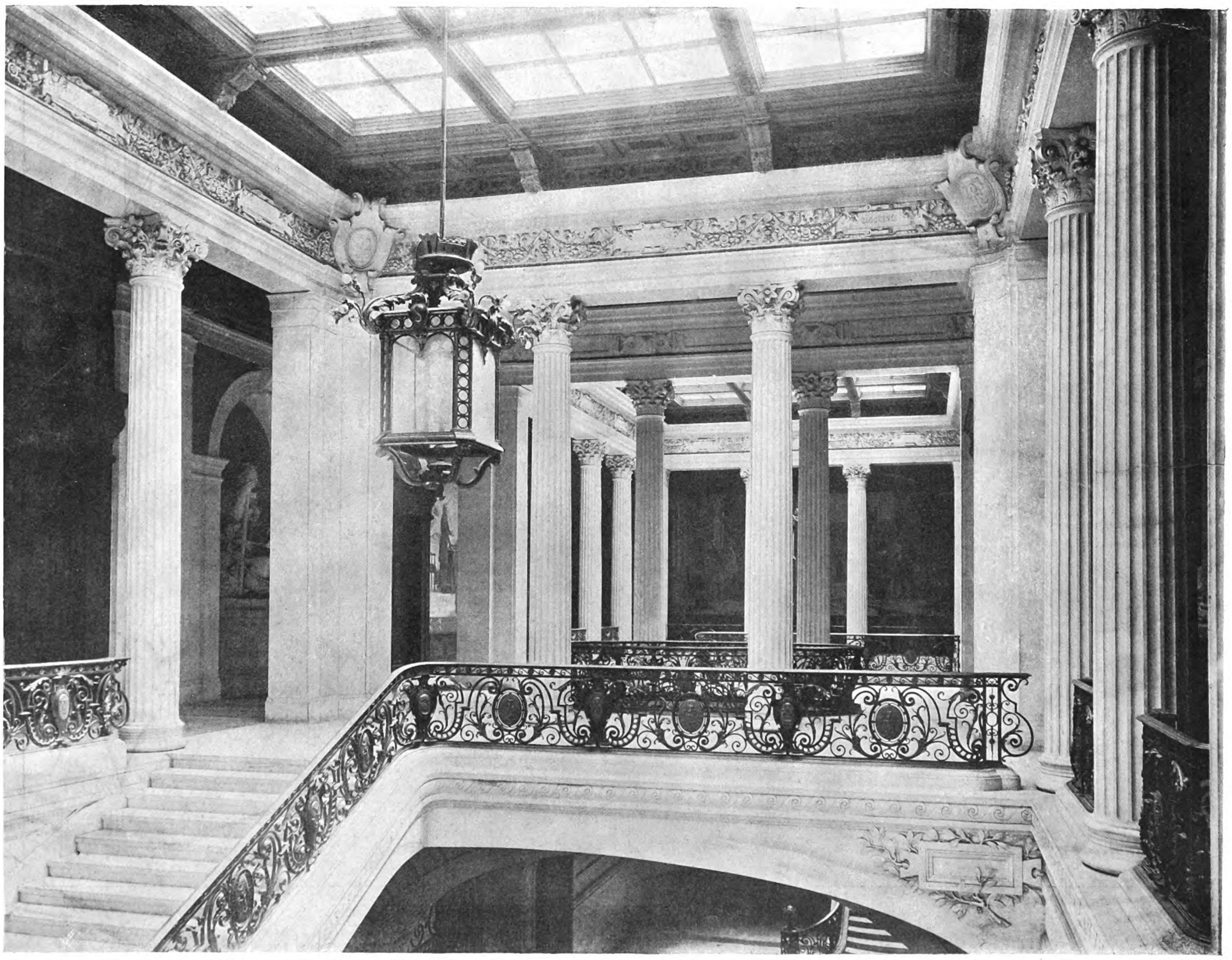
" I will not attempt to describe this great work, which took seventeen years to complete; it is well known to all visitors to Paris, and is the subject of a fine monograph by M. Nénot, a copy of which is in our library.

" M. Nénot has carried out numerous other works of importance, but it is with the Sorbonne that his name will always be specially associated.

" I know it is expected that the President when he presents the Gold Medal shall efface himself as soon as he has delivered a brief introductory address, but I cannot at a time like this hand to a distinguished Frenchman this token of our respect and admiration without telling him, and through him his own compatriots, something of what his great country is to us.

" It is a tradition that English people do not understand the French, and we may be almost grateful to the War for having revealed France to many who did not know her well. To architects the history and masterpieces of French architecture are of absorbing interest. Its unique Gothic architecture—the picturesque transition from Gothic to the matured and ordered Renaissance—modern work—all in turn claim our admiration, and show us achievements not only of the highest intellectual attainment, but containing always that something more than talent, that touch of personal and national genius so particularly characteristic of French architecture. France can boast of a long succession of highly distinguished architects who have gained their reputation by a profound study and complete mastery of the principles and technique of their art.

" All this splendid work can only have been done by a fine people. The very name France conjures up visions of a



THE SORBONNE, PARIS: GRAND STAIRCASE.

nation with as many facets as a diamond. Every period of its history is brilliant, but the France of to-day is perhaps the most impressive of all. Devoted to peace, although nursing a dignified determination to efface the memory of 1870, when the time came to put that determination into action there was at once manifest in every class and degree a quiet and serene determination to suffer everything, to endure everything, and to conquer. Never in the whole history of the world have such battles been fought as during this War. Never have more heroic deeds been performed; and yet, amidst all these gigantic happenings, the steadfast and unbreakable resistance at Verdun stands out in lurid relief, and will be told so long as the world endures. It is impossible to believe that our two nations, having fought shoulder to shoulder throughout these long terrible years, can ever again break a bond cemented by the blood of our sons; for all time, we shall be united by the tie of friendship based on mutual understanding, affection, and respect. This alliance should be proof against the insidious propaganda of that nation which has, to its eternal shame, brought to such perfection the truly devilish arts of lying, false witness, and sowing discord.

"I can only regret that it is not my pleasant duty to-day to decorate, as well as M. Nénot, a distinguished architect representative of the other Allies. We have already on our list of Royal Gold Medallists the names of famous Italian and American architects, and we may hope, when peace again allows us to pursue our art unhindered, to add to that list names from the allied nations not yet represented on our Roll."

For the guidance of future students of the annals of the Royal Institute, it should be mentioned that the medal placed in the hands of M. Thierry was a replica or token of the actual medal which will be delivered to M. Nénot when there is no necessity to reserve gold for more urgent uses than that of casting decorative medals. No doubt M. Nénot will cherish the "token" as an interesting memento of the exigencies of a tremendous epoch in history.

It is the Sorbonne, the strenuous work of seventeen years, that has secured for M. Nénot a permanent place in the history of French architecture. The contracts for the building were allotted in August 1884, and the foundations were dug in the following November. The first stone was laid on 5 August 1885, the work of construction was finished in August 1889, and the building was completed in July 1901. The grand amphitheatre had been inaugurated by President Carnot on 5 August 1889, but there was no further official ceremony.

A few figures will serve to indicate the magnitude of the task the young architect had undertaken. The total cost of the work was estimated at twenty-two million francs, and was not exceeded. The total area of the site was 21,000 square metres, the space occupied by buildings being less by 1,700 metres, representing the area of the principal courtyard. The four façades have a total length of 666 metres—namely, 83 metres on the Rue des Écoles, which comprises the principal entrance;

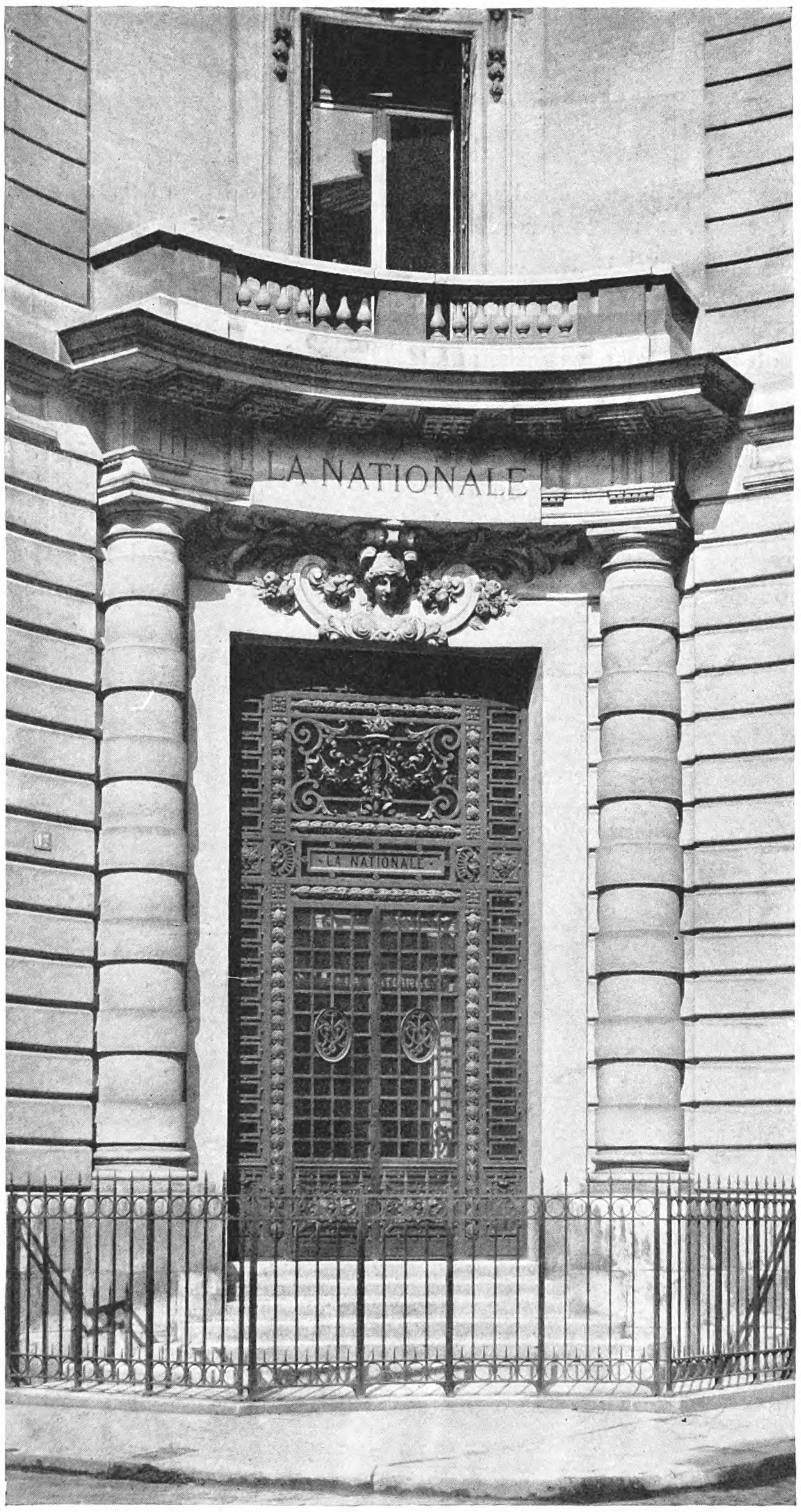
OCEANOGRAPHIC INSTITUTE, PARIS: DETAIL OF LARGE AMPHITHEATRE.

87 metres at the rear, on the Rue Cujas; 264 metres flanking the Rue Saint-Jacques; and 232 facing the Rue de la Sorbonne and its extension the Rue de Victor-Cousin. The sharp slope of the side streets offered serious difficulties, the difference between the level of the Rue des Écoles and that of the Rue Cujas amounting to the height of two stories.

The new Sorbonne contains twenty-two amphitheatres, five libraries, two art museums, sixteen examination rooms, thirty-seven private rooms for the professors, and two hundred and forty laboratories. These numerous apartments serve various learned societies—the School of Charts, the Faculty of Letters, and the Faculty of Sciences, the last-named comprehending the chairs of chemistry, geology, mineralogy, physiology, and physics. The physics department alone occupies a superficial area of 9,200 square metres.

M. Louis Aigoin, to whose sketch in "La France Contemporaine" (tome iii; Clement Deltour et Cie., 173–5 Boulevard Murat, Paris) this notice is much indebted, claims for Nénot all the natural gifts necessary to success in the career of his choice. His wide brow reveals a fine intelligence; his broad shoulders denote a robust constitution; and his countenance, while radiating geniality, indicates an energetic temperament. The honours bestowed upon him (to which the Royal Gold Medal has now been added) include the French Military Medal; he is Officier de l'Instruction publique; he was named Chevalier of the Legion of Honour in 1885, Officer in 1895, and Commander in 1901. He was elected member of the Beaux-Arts Academy in 1895. He married on 4 November 1886, Mlle. Isabella Mathias, daughter of Ferdinand Mathias, engineer-in-chief of the Nord Railway, and has four daughters.

Concerning the Sorbonne, Mr. A. E. Richardson, F.R.I.B.A. (who is now serving with the Forces), has written, in the "A.A. Journal" of April 1917: "M. Nénot's great opportunity as an architect came when he was appointed to remodel the old Sorbonne, which was originally built with the church of that name in 1629 by Le Mercier, it is understood at the instigation of Richelieu. The character of the old building determined the style of the additions, but this did not prevent the exclusion of modern requirements, neither did it oppose the incorporation into the new scheme of the best points of M. Nénot's Grand Prix design of 1877. The rejuvenated University not only expresses the sentiment of 1629, but it represents both in conception and detail the aspirations of the 1830 school of Louis Duc (Joseph Louis Duc was the R.I.B.A. Gold Medallist of 1876), and reflects in a marked degree the highly original detail evolved by the latter architect for the additions to the Palais de Justice facing the Place Dauphin. In this is to be seen the value of sequence in national tradition, in so far as architecture is concerned. Attention must be given to the design of the grand amphitheatre at the Sorbonne, which is the most recent, as well as the most complete, development of the D plan with public tribunes, initiated by Gisors in the Napoleonic period for the Chambre des Pairs at the Luxembourg. M. Nénot for this work collaborated with eminent sculptors and artists, among whom the name of Puvis de Chavannes outstands. Both in conception and execution the new Sorbonne ranks among the noblest achievements of French building and logical development."



ENTRANCE TO BANK: RUE LAFITTE AND PILLET-WILL, PARIS.

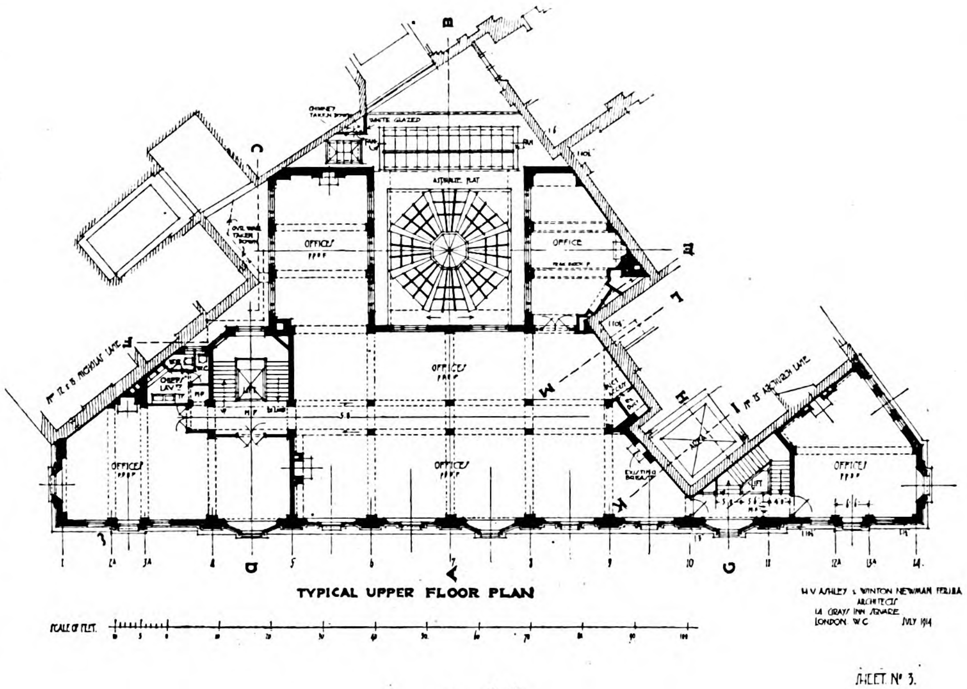
M. Henri Paul Nénot is the author of several important works in Paris. These, in order, comprise the Institut Océanographique, the Banque Dreyfus, the Bureaux de la Compagnie Générale Transatlantique, the Administration de la Compagnie d'Assurance, la Nationale, and the Administration de la Compagnie Internationale des Wagons-Lits.

The Transatlantique building is a remarkably dignified treatment of a commercial theme. The framework of the window is of bronze, the two figures in the central group symbolizing respectively commerce and the genius of the French Maritime Service; the decorations throughout comprising marine objects. The dolphins on the cornice are also in bronze.

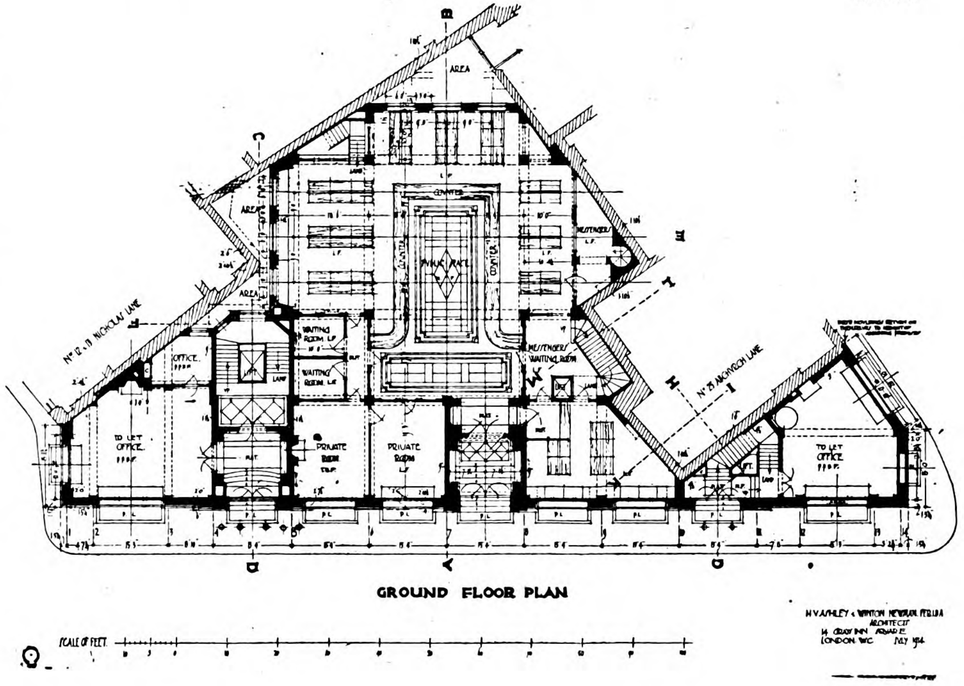
THE NEW PREMISES OF THE COMPTOIR NATIONAL D'ESCOMPTE DE PARIS.

IF there is one thoroughfare in the City that has undergone more changes than any other during the past few years it is King William Street. Though less than a hundred years old—it was built in 1831 in commemoration of the opening of the new London Bridge by King William—it possesses to-day little more than a trace of its original appearance. It is apparently a peculiarity of early nineteenth-century buildings that they should outrun their term of usefulness well within the century. In Regent Street, of course, we have the Classic example (in more senses than one); little of the work of Nash and his compeers remaining to mark the glory that was once the Regency. King William Street, though of a somewhat later period, has sunk even more quickly to its close. The original buildings with which the street was lined were designed by the three official architects to the Board of Works, one of whom was Mr. (afterwards Sir) Robert Smirke—an architect who, it may be recalled, has been unfortunate elsewhere in London, notably at St. Martin's le Grand, where the site of the old G.P.O. still remains in a state of pathetic desolation.

But the buildings of King William Street were of the type that inevitably come to demolition. The architects had somehow contrived to make them unutterably gloomy; and it was no doubt this handicap, combined with an obvious unsuitability to modern requirements, that finally determined their fate.



TYPICAL UPPER FLOOR PLAN



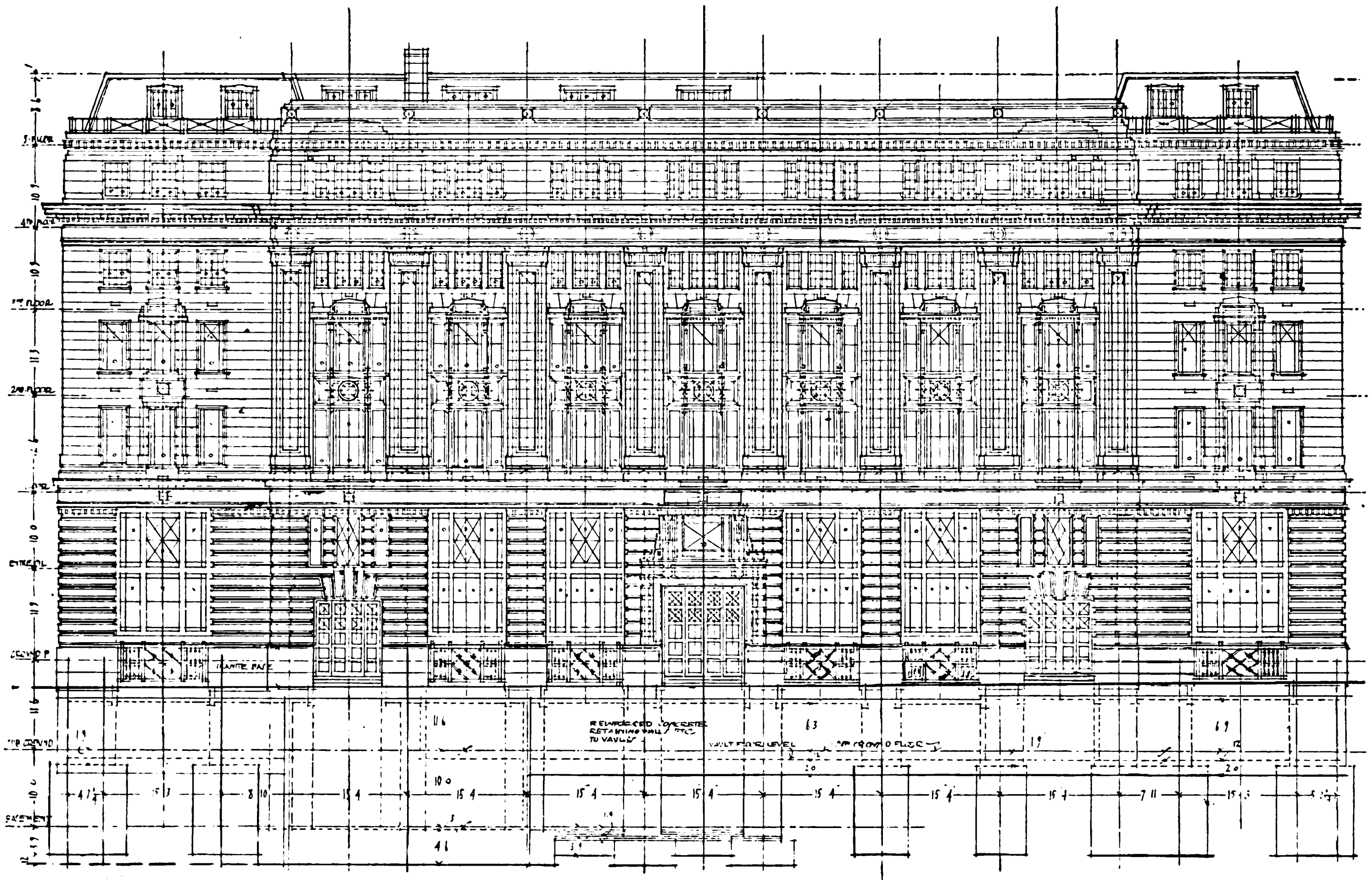
GROUND FLOOR PLAN

At the present time there is merely a vestige of the old work remaining on the west side of the street, and only a little more than that on the east. All the rest has been rebuilt within recent times. At the end of the street which is nearest the Bank we have first of all the great Scottish Provident Institution Buildings designed by Messrs. Dunn and Watson. Next is the big block which constitutes the headquarters of the Phœnix Assurance Company, completed only last year from the designs of Messrs. J. Macvicar Anderson and H. L. Anderson (illustrated in THE ARCHITECTURAL REVIEW for April 1916). Beyond this are the fine new premises of the Comptoir National d'Escompte de Paris, which, just completed from the designs of Messrs. H. V. Ashley and Winton Newman, FF.R.I.B.A., form the subject of our present illustrations.

In this case the architects were confronted by a problem of more than ordinary perplexity. The site, as will be seen from the accompanying plans, is of very irregular formation—at one point the adjoining property is only 4 ft. from the main front. The architects, however, have overcome all difficulties in a masterly manner, producing, out of one of the most awkward sites that could possibly be imagined, a remarkable effect of formality and regularity.

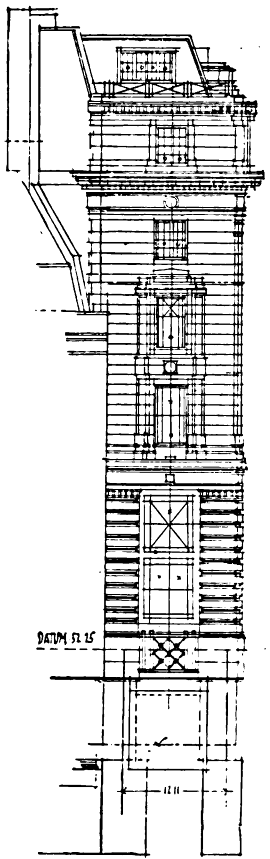
The greater part of the frontage to King William Street, and the interior of the site on the ground floor and under, is allocated to the bank, while the two corner sites by Abchurch Lane and Nicholas Lane provide admirable positions for smaller companies; the first floor and over are given up to offices for letting.

The planning of the banking premises has received chief consideration, the architects' endeavour having been to embody the particular requirements that were laid down by the directors. The large banking hall is placed centrally on the site, with the main entrance in the centre of the King William Street frontage. Managers' rooms and waiting-rooms are to the left of this entrance, and to the right are the stock department, messengers' rooms, and main staircase to boardroom, balcony, and sub-ground floors, etc. The banking hall is a fine lofty apartment over 20 ft. high, with a large dome light and with ample public space. Accommodation is provided for ninety-one clerks on the floor of the hall and for forty-three clerks on the entresol or balcony overlooking the hall. A secondary staircase at the far end of the bank gives additional access to the sub-ground floor; this latter floor is occupied, as to the front part, with desks for seventy clerks, and as to the back part, with ample cloakroom

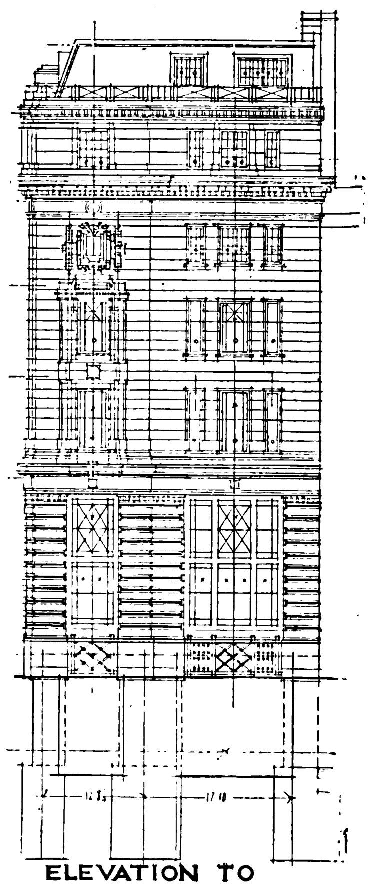


ELEVATION TO KING WILLIAM STREET

and lavatory accommodation for managers and staff, and, in addition, a second messengers' room, which can be reached by a circular stair from their room over on the ground floor. Below are placed the bookrooms and strongrooms, the latter being properly isolated and under the sole control of the strongroom clerks, who have their own lift down.



ELEVATION TO NICHOLAS LANE



ELEVATION TO ABCHURCH LANE

The strongrooms consist of four spacious vaults, each about 28 ft. by 14 ft., and satisfy all the requirements of the bank for protecting its securities and books. Each vault is provided with an independent steel door opening into a corridor, which itself is covered by an exceptionally heavy "Treasury" door weighing upwards of five tons. An alternative entrance to the series of inner vaults is provided by a special emergency door corresponding in design and strength to the main entrance door. Every conceivable form of attack is provided against. The doors have a total thickness of about 14 in., and are secured by three independent locks of the finest description, their operation being dependent upon a quadruple movement time-lock.

The boardroom is on the first floor, and is approached from the banking hall.

Particular attention has been given to the daylight lighting of the whole of the premises, which are remarkably well lighted, heated, and ventilated throughout.

If, in years to come, it should be found necessary to increase the accommodation for clerks or for other purposes, the first floor could be taken over, and the staircase now leading to the balcony could be continued up to this floor without difficulty.

In addition to the ground- and sub-ground-floor premises at the two corners of the site, the upper floors, commencing at the first floor, are available for letting. The arrangement of these floors has been left as open as possible, so as to be capable of subdivision as required by prospective tenants. Ample staircases and lifts, separate from the bank, are provided, and the top floor is given over to lavatory accommodation for the several suites of offices and to caretakers' quarters.

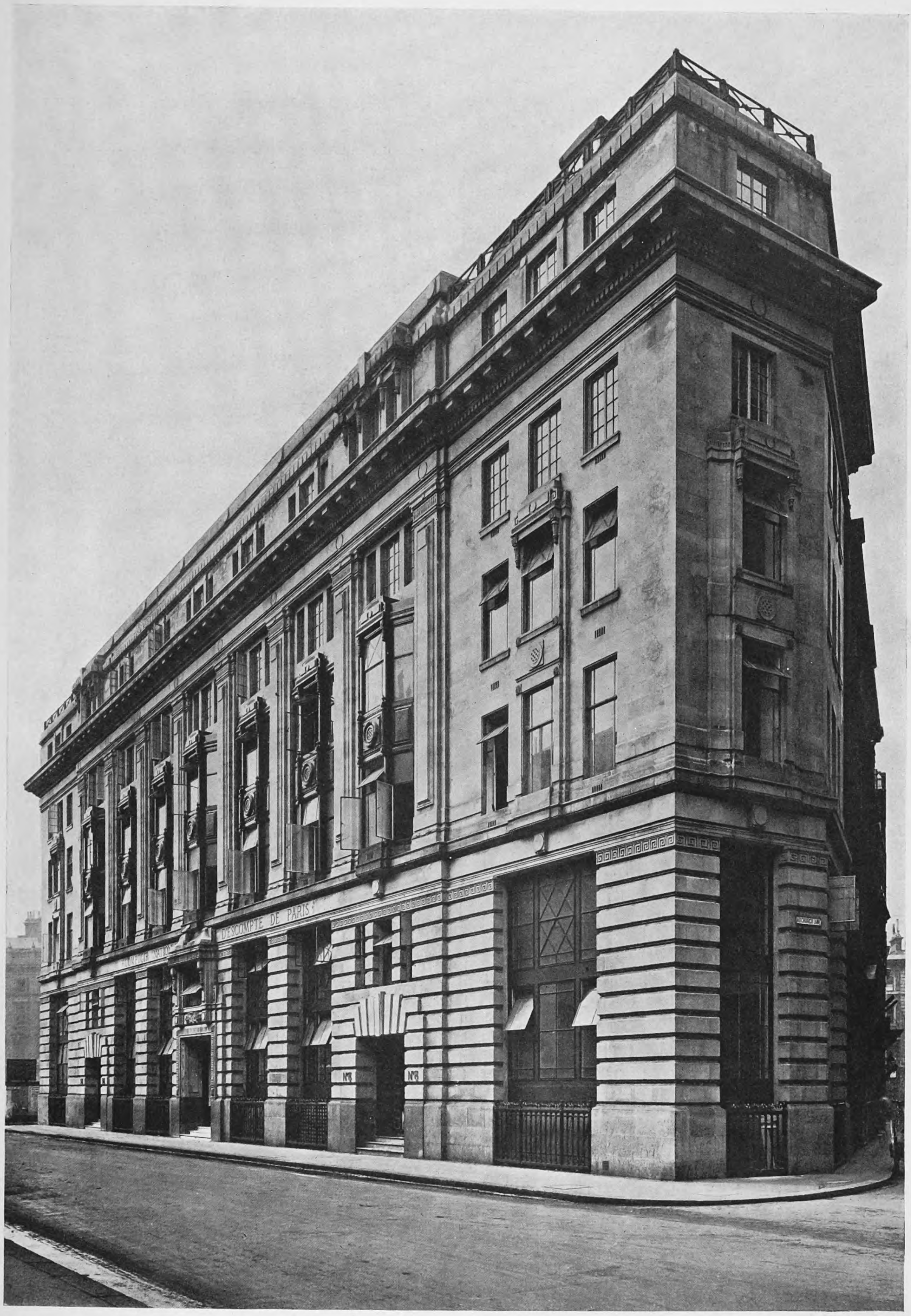


Plate IV. July 1917. Photo: Bedford Lemere.

NEW PREMISES OF THE COMPTOIR NATIONAL D'ESCOMPTE DE PARIS, KING WILLIAM STREET, LONDON: GENERAL VIEW.

H. V. Ashley and Winton Newman, FF.R.I.B.A., Architects.

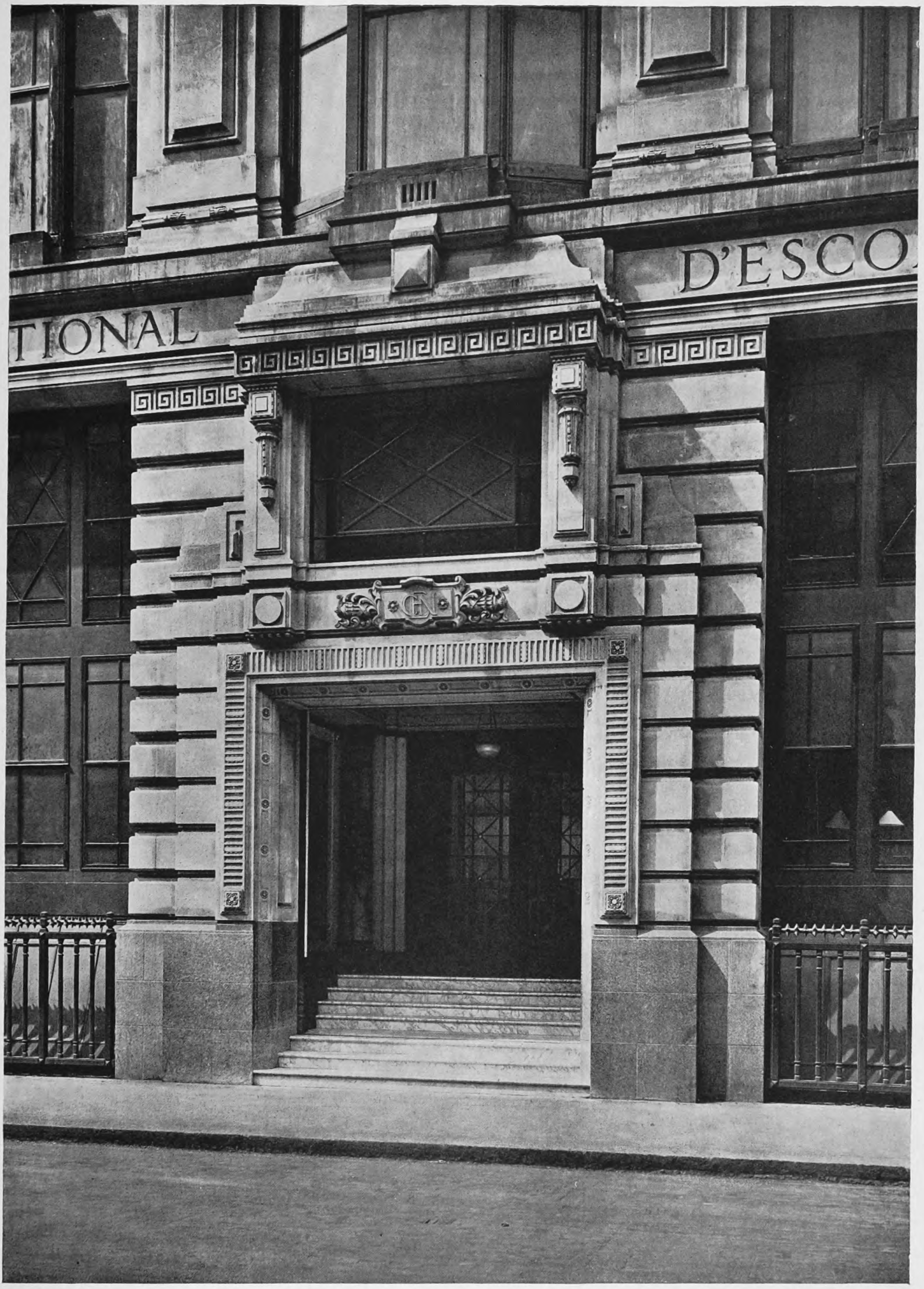


Plate V. July 1917. Photo: Bedford Lemere.

NEW PREMISES OF THE COMPTOIR NATIONAL D'ESCOMPTE DE PARIS, KING WILLIAM STREET, LONDON: DETAIL OF MAIN ENTRANCE.

H. V. Ashley and Winton Newman, FF.R.I.B.A., Architects.

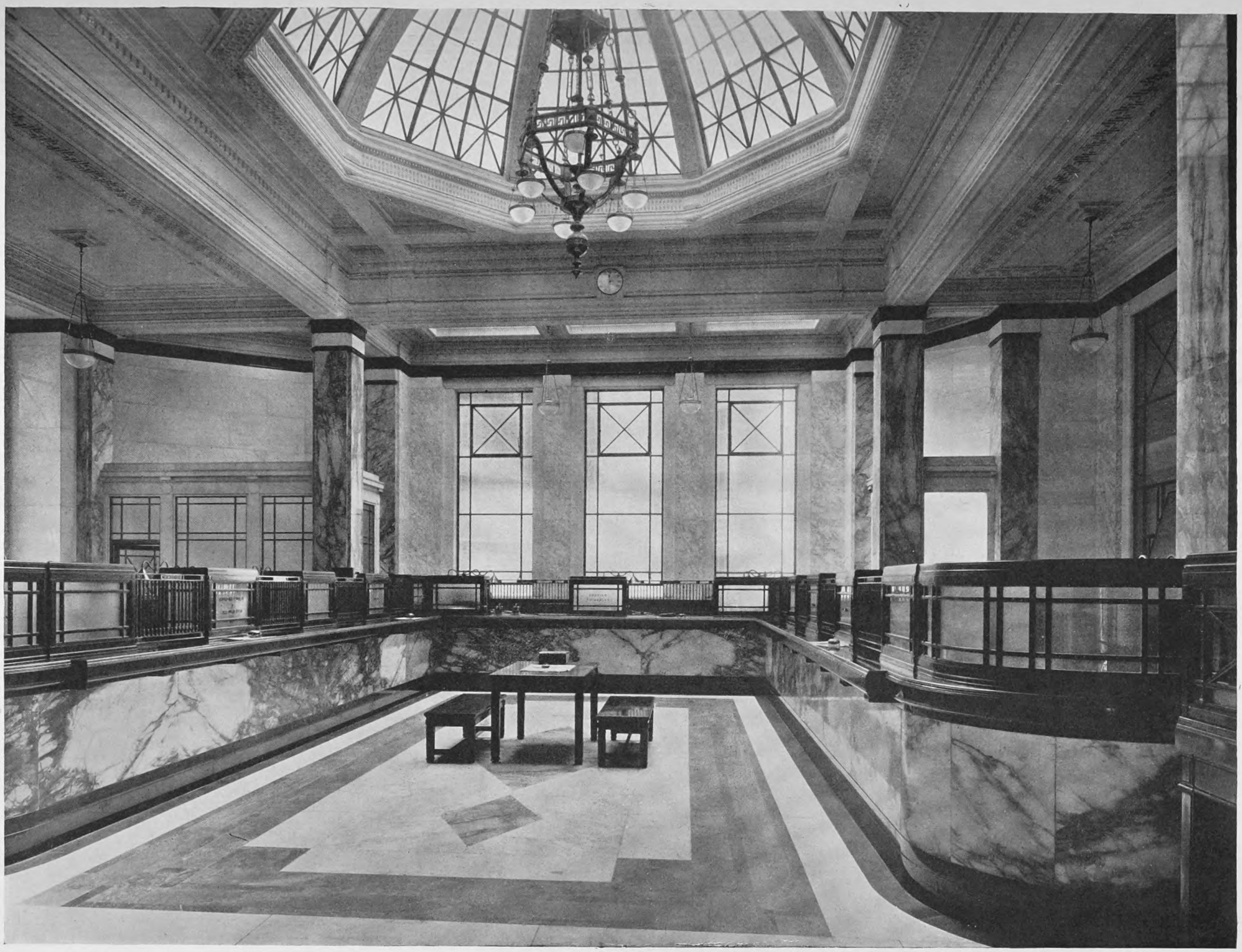


Plate VI. July 1917. Photo: Bedford Lemere.

NEW PREMISES OF THE COMPTOIR NATIONAL D'ESCOMPTE DE PARIS, KING WILLIAM STREET, LONDON: THE BANKING HALL.

H. V. Ashley and Winton Newman, FF.R.I.B.A., Architects.

The building is a steel-framed structure, fire-resisting throughout. The frontages to the streets are faced with Portland stone with a granite base, and the open courts in the interior of the site are faced with white glazed bricks. Internally the upper floors are very simply treated; but the banking hall and managers' room are finished in a more elaborate manner, with marble and decorative plaster ceilings.

The building contains a quantity of fine marble-work. In the main entrance brecciated Sienna is used for the column shafts, with black marble caps and bases, the walls having Piastraccia quartered panels with bands of "second statuary," statuary vein, and black. Skirtings are also in black marble. Cornices are in second statuary and black, and the architraves to doorways are in Ashburton (Devon) marble. Paving and steps are in Piastraccia. In the lobby to the banking hall second statuary is used for column shafts, and black marble for bases, caps, and skirtings. Wall linings are in Piastraccia and second statuary, and the cornice is in second statuary and black. In the banking hall itself the pier shafts are in brecciated Sienna marble. Skirtings and bases are in black marble, also the dado rail. The dado filling is in brecciated Sienna. The pilasters are in Piastraccia, and pier caps and main cornices are in second statuary and black, the wall linings generally being in second statuary. The treatment of the screens is in similar marbles, but the cornices are in second statuary only. Pavings to the banking hall and entrance are to geometrical designs, the marbles being light and dark Swedish green, Coombe Rosa, second statuary, Piastraccia, and black. In the main staircase entrance Ashburton marble is used for the column shafts, with black and Ashburton marble bases and skirtings. The column caps are in black marble. The walls are in second statuary, dove and black bands, with statuary vein panels. The architraves to the main doorways are in Ashburton. Pavings and steps are in Piastraccia. In the main staircase Ashburton skirtings are used, with wall linings in statuary vein with dove marble bands. There are light Hopton stone margins to the paving on the landings. The subsidiary staircase is executed in similar marbles. The external facings to the principal windows on the lower floors are executed in black marble, the interior linings being in second statuary.

The whole of the site is tanked in asphalt. On account of its position this work required a great deal of special attention. The whole of the flat and sloping roofs, dormer tops and vertical cheeks, also the reveals to the windows, are lined in asphalt; the gutters are also formed in the same way. A rather remarkable piece of work, and one that was very difficult to carry out, was the covering of the reinforced concrete ribs of the spherical light in the area.

One interesting feature of the work is the provision that has been made for the use of gas for heating purposes. The building has been carcassed throughout with a gas supply, points running to every fireplace, so that when each room comes to be occupied the installation of gas heating stoves will be accomplished with a minimum of trouble and expense to tenants. The gas arrangements are such that any subdivision of the floors can have a separate supply for heating if required.

All the necessary conveniences of a modern banking institution have been installed—heating, mechanical ventilation (inlet and extract), telephones, autophones, synchronized clocks, vacuum cleaners, mechanical carriers, and many devices for the watchman and for the strongroom departments, all the latter being separately and ingeniously ventilated.

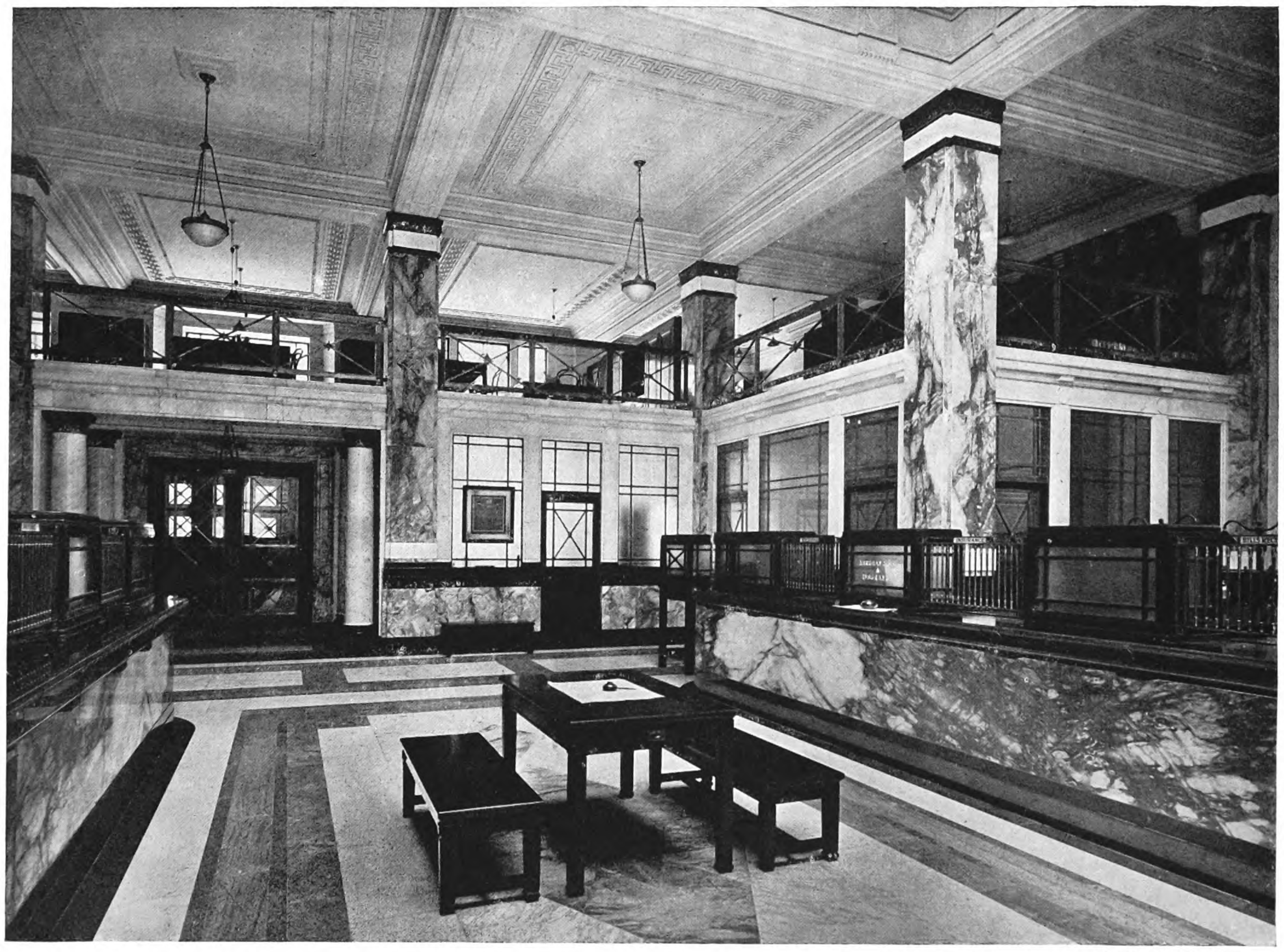
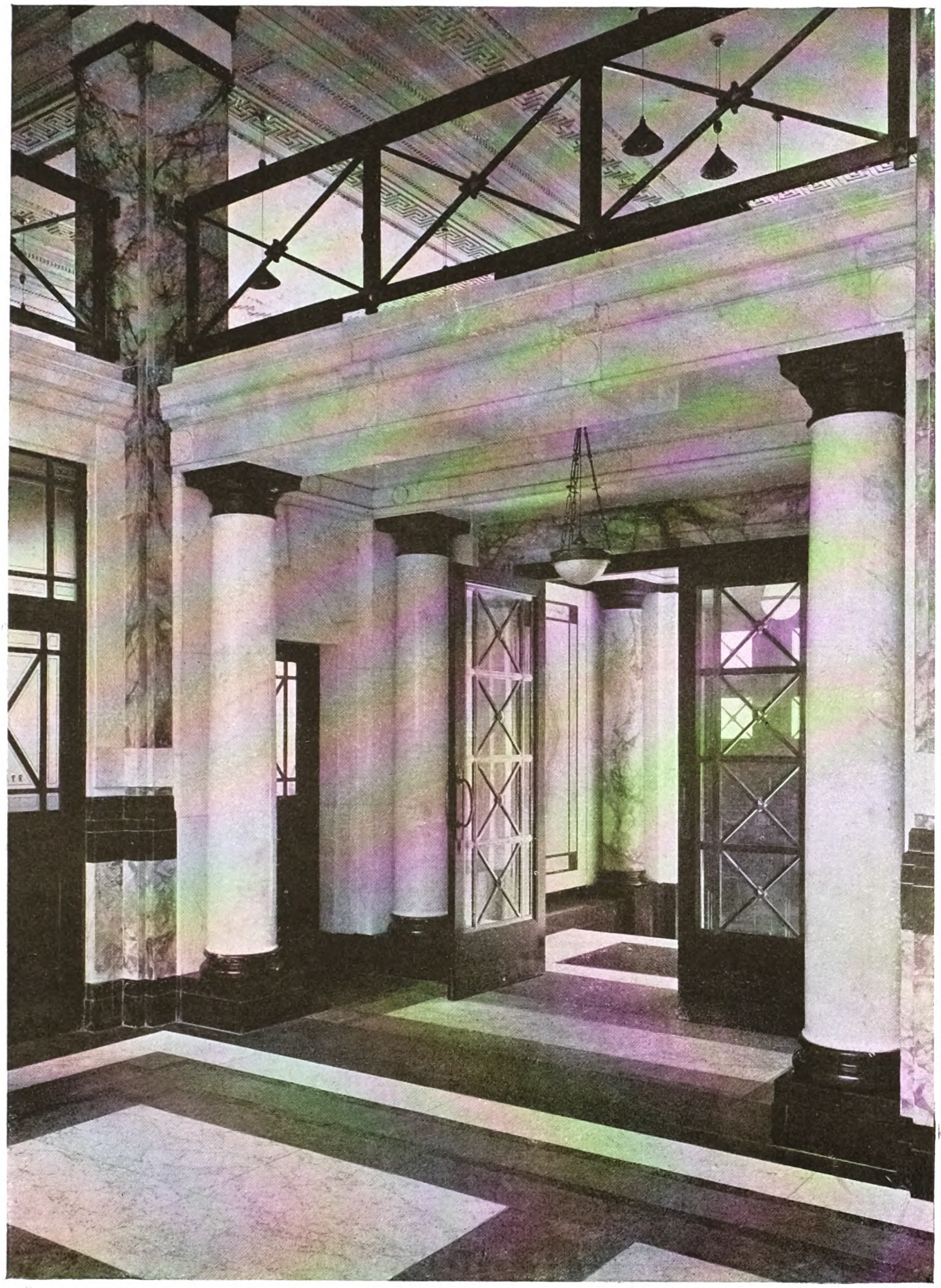
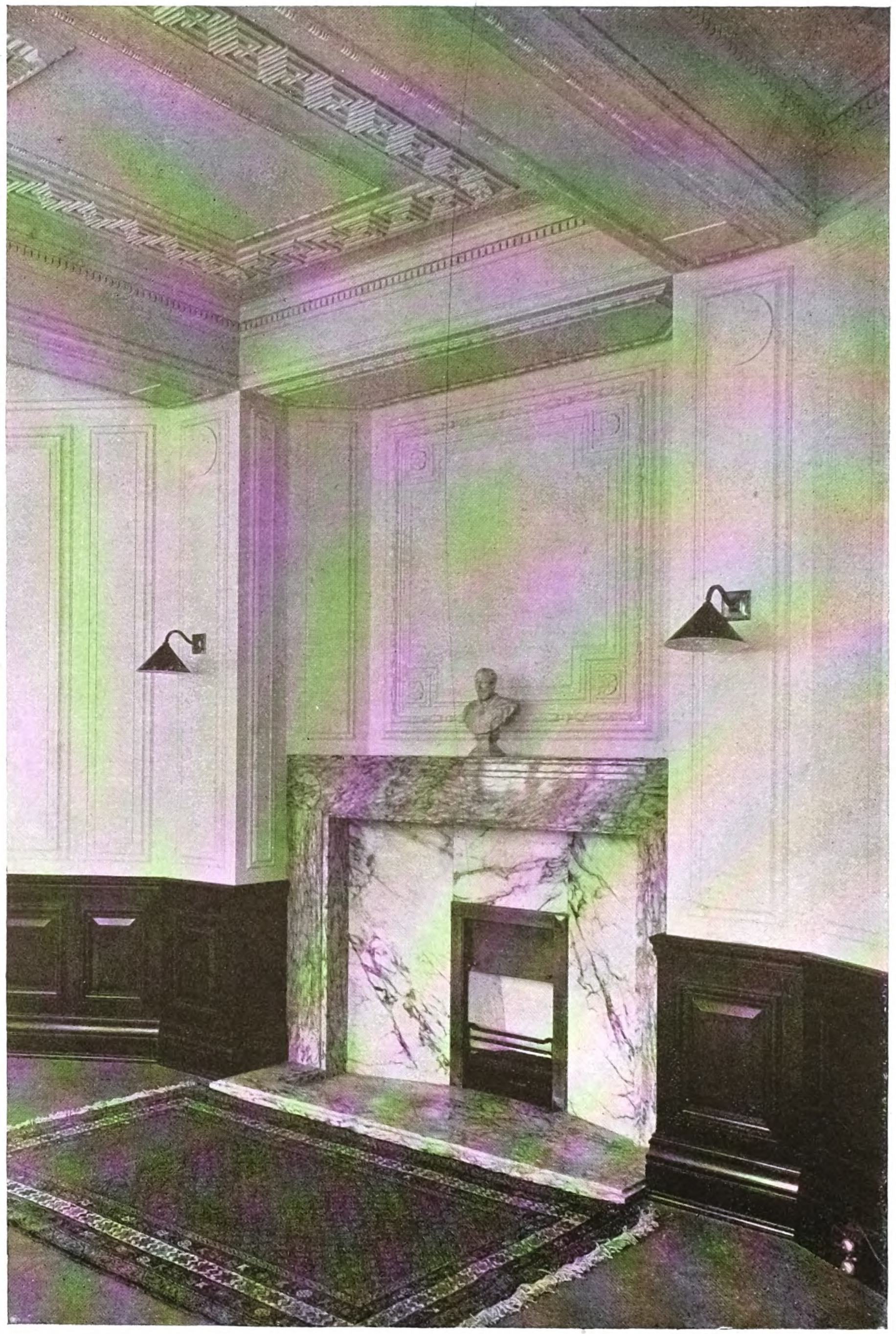


Photo: Bedford Lemere.

VIEW IN BANKING HALL, SHOWING BALCONY.



View of Main Entrance from Banking Hall.

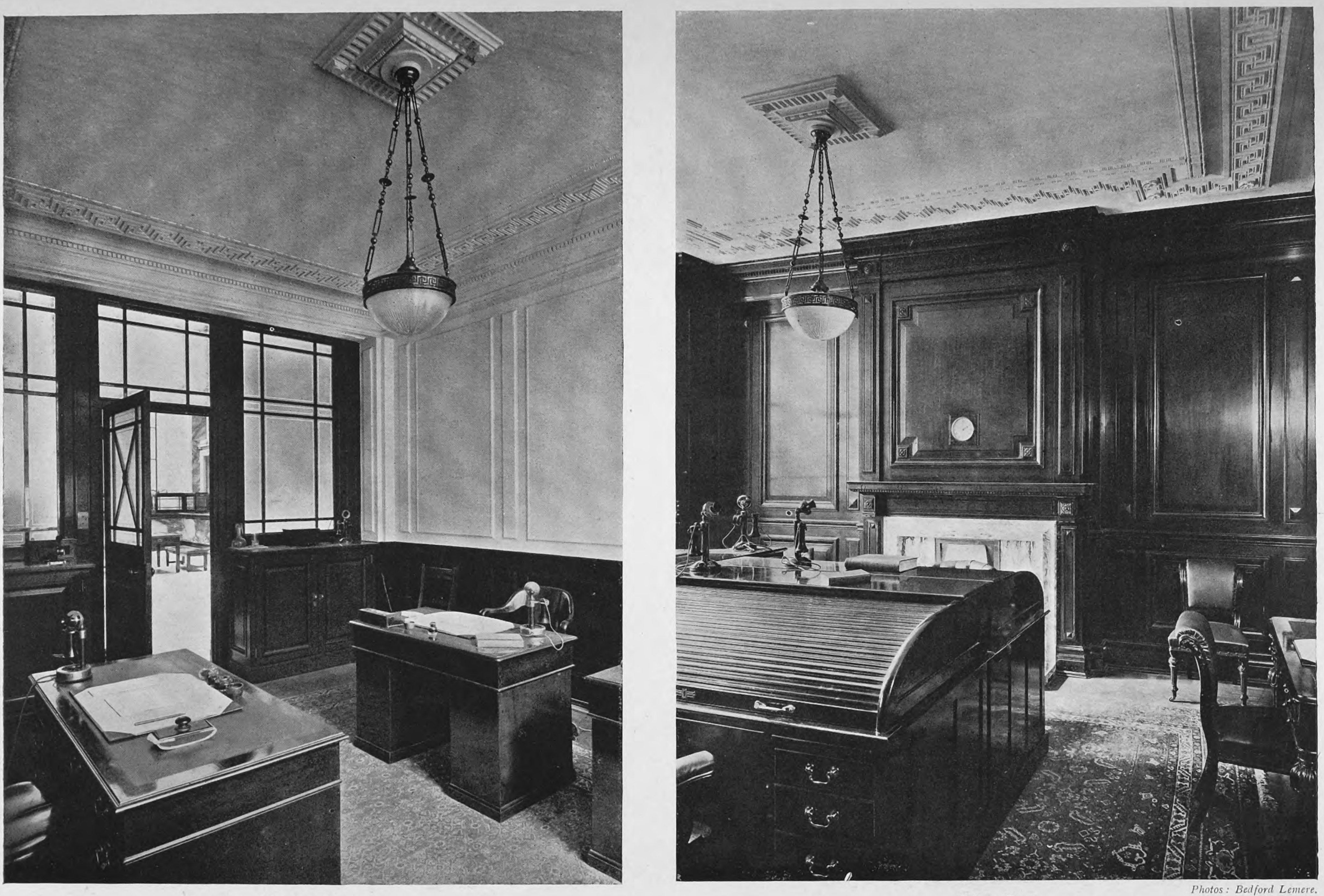


Detail cf Board Room.

Photos: Bedford Lemere.

NEW PREMISES OF THE COMPTOIR NATIONAL D'ESCOMPTE DE PARIS, KING WILLIAM STREET, LONDON.

H. V. Ashley and Winton Newman, FF.R.I.B.A., Architects.



Signatures Room.

Private Room.

Photos: Bedford Lemere.

NEW PREMISES OF THE COMPTOIR NATIONAL D'ESCOMPTE DE PARIS, KING WILLIAM STREET, LONDON.

H. V. Ashley and Winton Newman, FF.R.I.B.A., Architects.

The building being for one of the premier banking institutions of France, the intention of the architects was to impart some French feeling to the architecture, and yet to maintain dignity and restraint. In this they have succeeded admirably. The strong lines and simple character of the two end portions act as an excellent foil to the centre portion, with its vertical lines and bay windows, and further accentuate the banking premises.

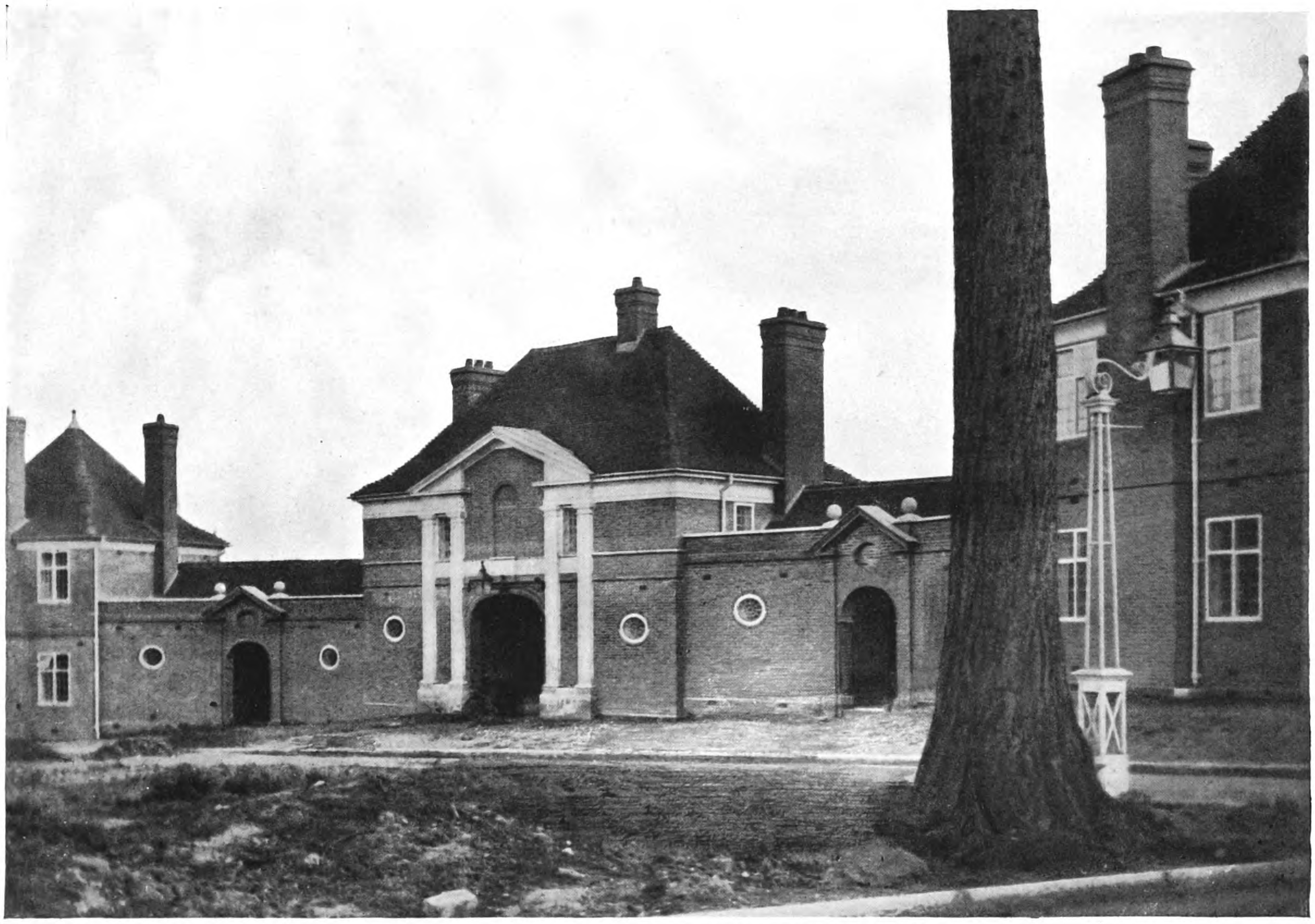
We are glad to note that the architects have departed from ordinary practice in the treatment of their elevations. The colonnade motif, under suitable conditions, makes an imposing front; and columns and overhanging entablatures and recesses lend so much to light and shade that it is difficult to dispense with such assistance. But the opportunities for the use of the colonnade are by no means unlimited, and within recent years it has been often inappropriately and clumsily employed. In London and all old cities with narrow streets a flat treatment is really the only sane solution, though it requires very detailed thought and study. Messrs. Ashley and Newman are to be congratulated upon the success which they have achieved.

The general contractors for the building were Messrs. Higgs and Hill, Ltd., who were also responsible for the whole of the stonework, joinery, bank fittings, and plumbing, all this work having been prepared at Crown Works, Lambeth. Granite for the exterior, flooring mosaic, and various kinds of marble for interior decoration, were supplied by Messrs. H. T. Jenkins and Son, of Torquay. The asphalt used throughout the building was supplied by Messrs. Thomas Faldo & Co., Ltd., of London. The gasfitting work was executed by Messrs. The Gas Light and Coke Company, of Westminster. Strongroom doors, etc., were supplied by Messrs. Hobbs, Hart & Co., Ltd., of London. Lifts and cranes were supplied by Messrs. Waygood-Otis, Ltd., of London. Staircases were supplied by Messrs. Haywards, Ltd., of London. Tiles were supplied by Messrs. Carter & Co., Ltd., of London, and slates by Messrs. The Old Delabole Slate Company, of Cornwall. Metal casements and fittings were supplied by Messrs. The Crittall Manufacturing Company, Ltd., of Braintree and London. The consulting engineers were Messrs. Whitaker Hall and Owen, and Mr. Theodore Stevens was the electrical engineer.

Other sub-contractors were: Messrs. The Bath Stone Firms, Ltd., Messrs. Ames and Hunter, Messrs. Dorman Long & Co., Ltd., Messrs. Diespeker & Co., Ltd., Messrs. Luxfer Prisms, Messrs. Thomas Elsley, Ltd., Messrs. Shanks & Co., Ltd., Messrs. Goddard and Sons, Mr. F. Geere Howard, Mr. L. A. Turner, Messrs Hart Son, Peard & Co., Ltd., Messrs. Walker and Worsey, Messrs. J. Jeffreys & Co., Messrs. J. W. Gray & Co., Messrs. Alfred Williams & Co., Messrs. Chas. Winn & Co., Messrs. Lampscn Pneumatic Tube Co., Ltd., and Messrs. Stuart's Granolithic Co., Ltd.

MESSRS. HEAL & SON'S BUILDING.

We regret that two inaccuracies occurred in our notice of the above building, illustrated in our last issue. The hanging signs and all the special electric light fittings were designed by Messrs. Smith and Brewer, though Mr. Horace Talbot executed the actual painting of the former; and the latter were made and painted in Messrs. Heal & Son's workshops under the direction of the architects.



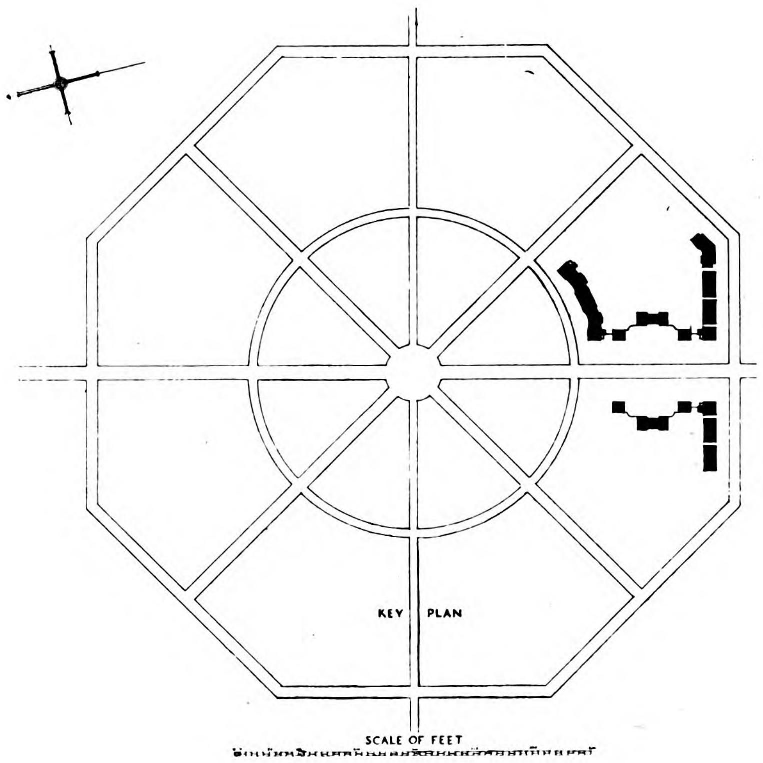
THE WHITELEY HOMES, BURHILL, WALTON-ON-THAMES.
Mervyn E. Macartney, F.R.I.B.A., Architect.

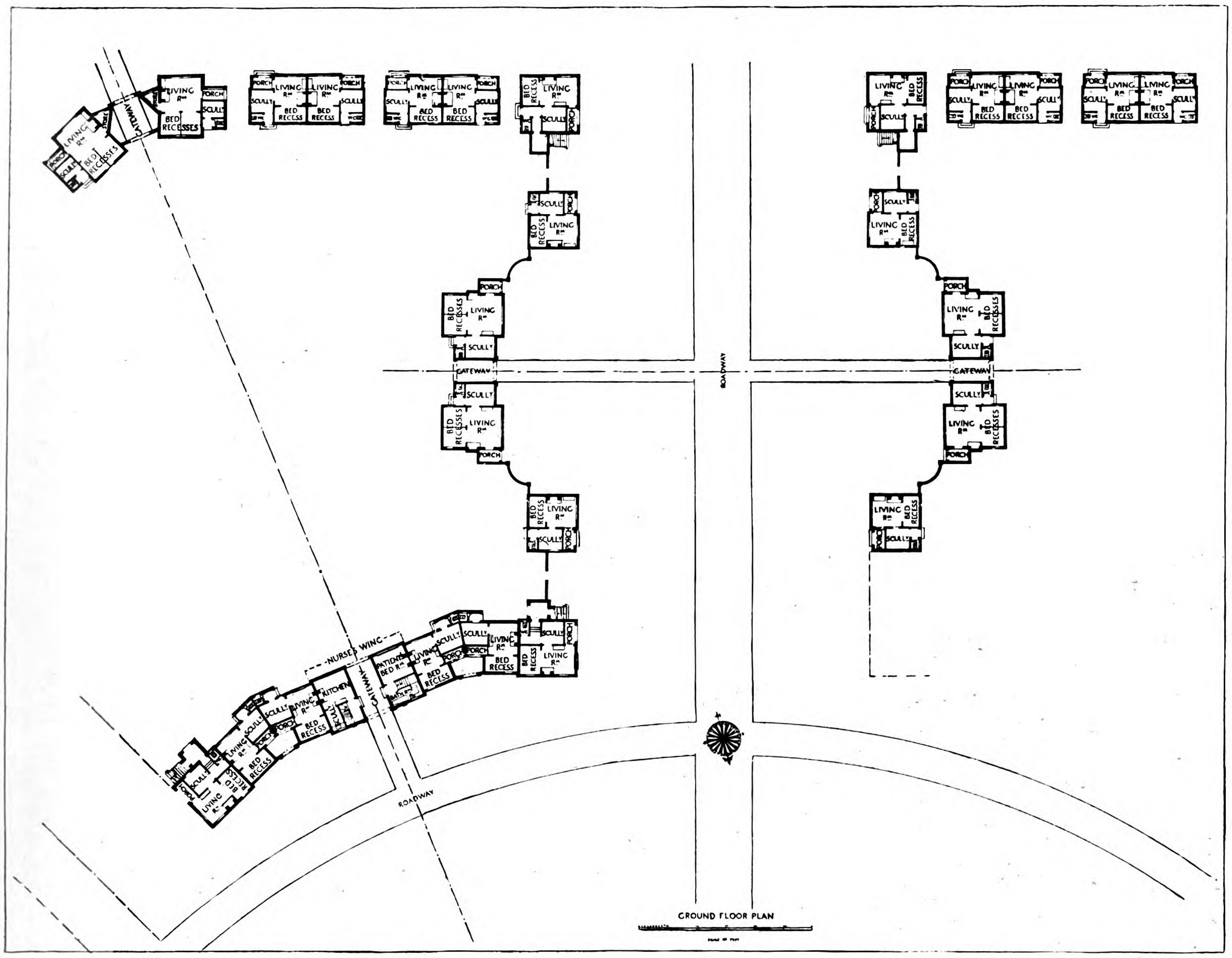
THE WHITELEY HOMES, BURHILL, WALTON-ON-THAMES.

The Whiteley Homes, Burhill, Walton-on-Thames, are being erected from the designs of several architects, one of whom is Mr. Mervyn E. Macartney, whose portion of the scheme, Section No. 5 of the Octagon, is shown by the accompanying illustrations. This section, which will be found indicated on the block plan, is one of those having the disadvantage of a steep fall in the ground, from west to east. Unfortunately the levels were not taken into consideration sufficiently when these buildings were designed. At a later date they gave rise to a considerable readjustment of the elevations. The interlocking of the work of the various architects in each section of the Octagon has militated against their work in an unexpected way, hardly realized in the original setting out.

It is interesting to note that a diversity of designs has been secured on a standardized plan, and the practice is one which will in all probability be greatly developed as time goes on.

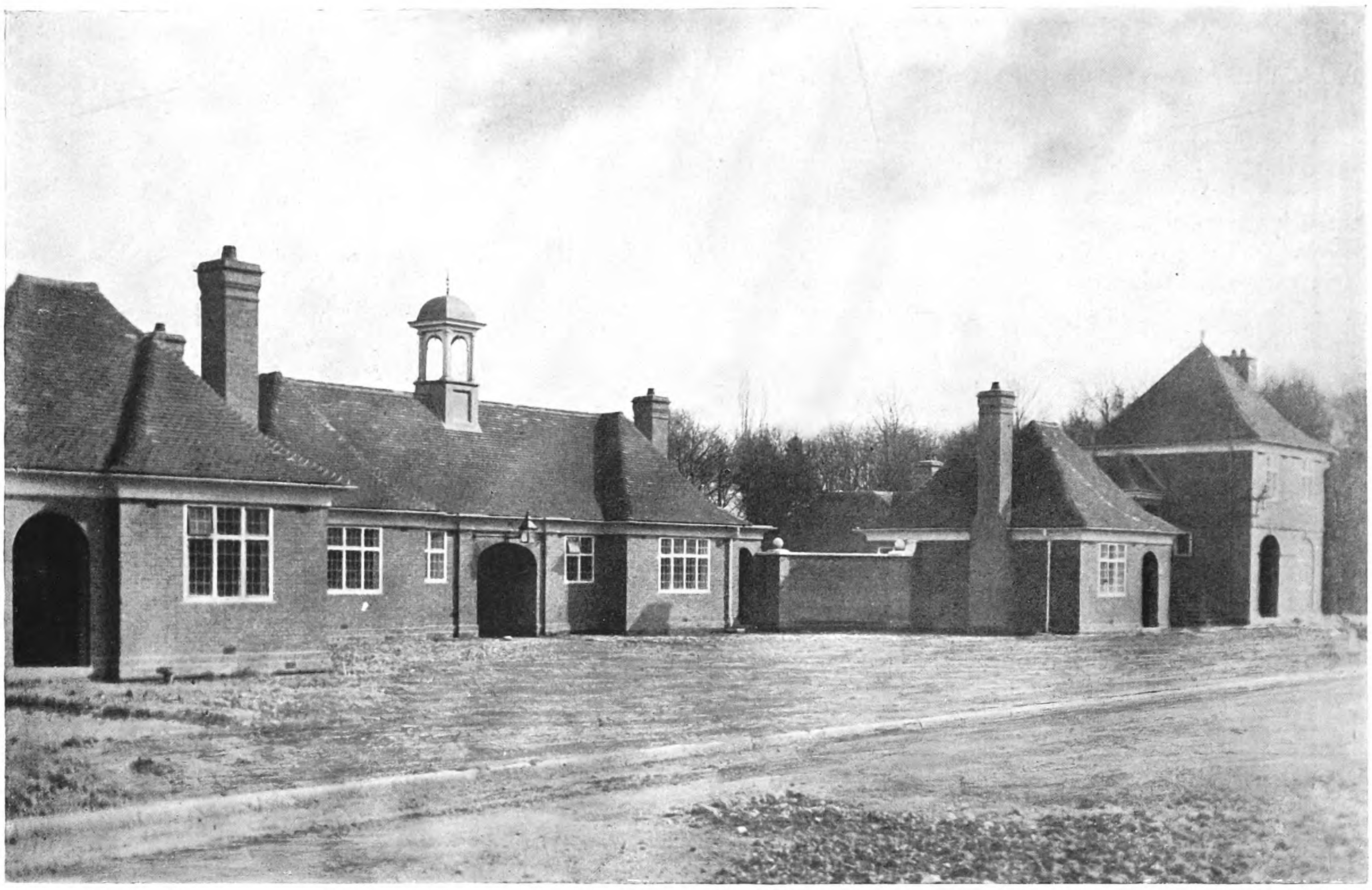
The principal contractors were Messrs. H. Martin, Ltd., of Northampton, who, in spite of war-time difficulties, have carried out the work in a most satisfactory manner, so far as this section of the scheme is concerned. Mr. Frank Comport was the resident clerk of works.

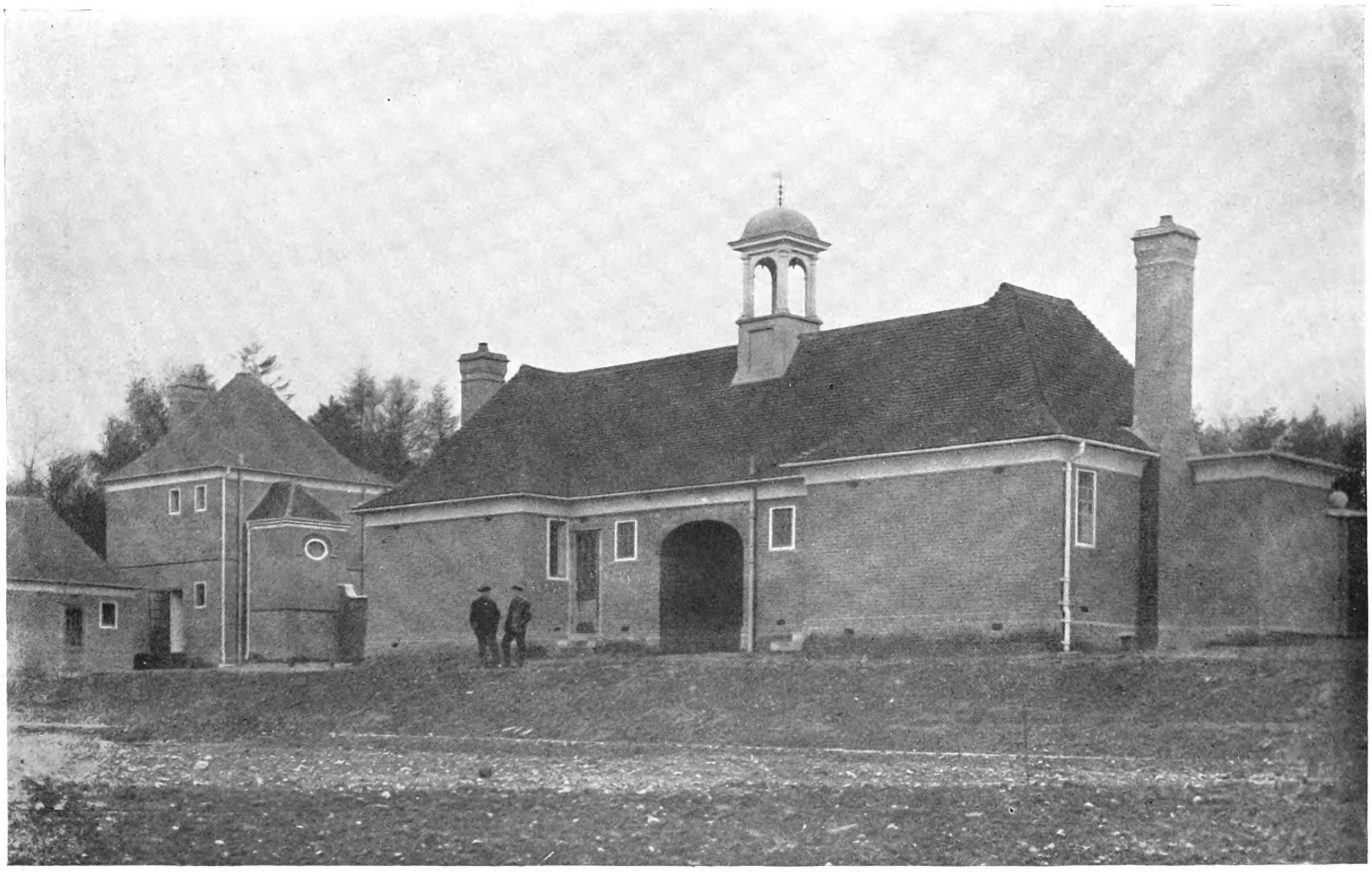




THE WHITELEY HOMES, BURHILL, WALTON-ON-THAMES: KEY PLAN AND GROUND-FLOOR PLANS.

Mervyn E. Macartney, F.R.I.B.A., Architect.





THE WHITELEY HOMES, BURHILL, WALTON-ON-THAMES.
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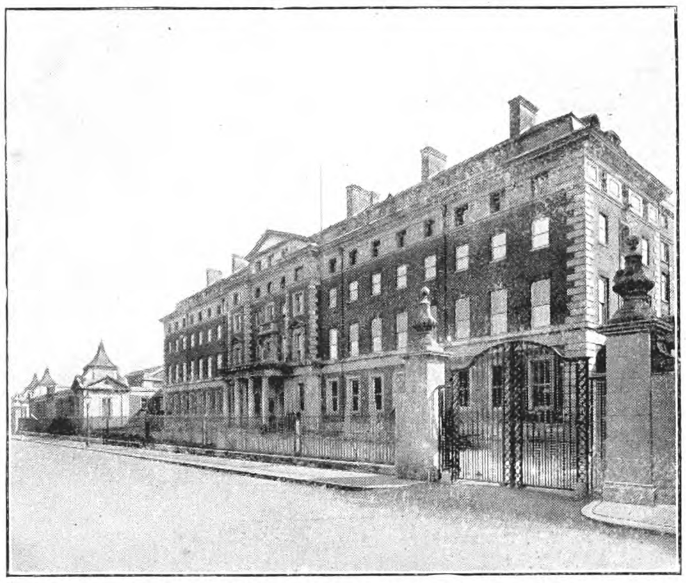

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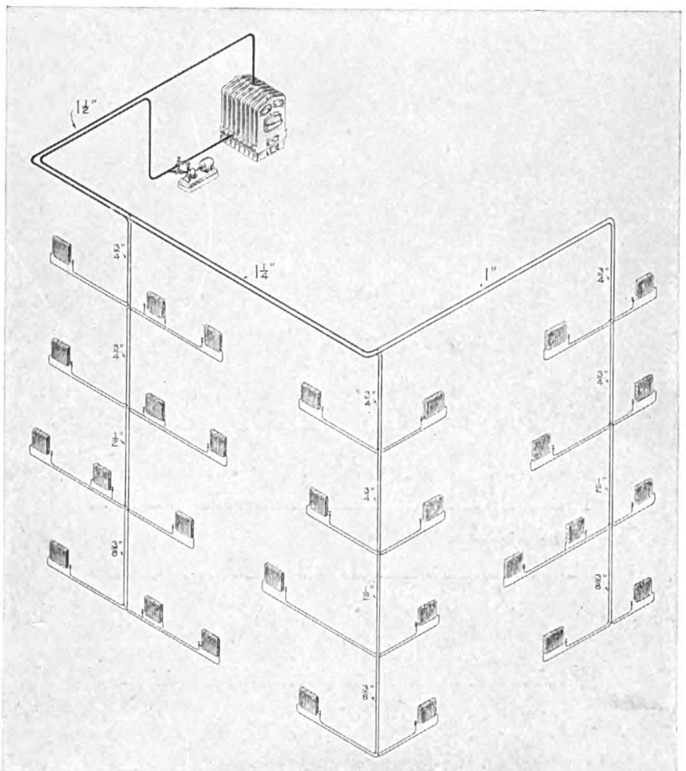

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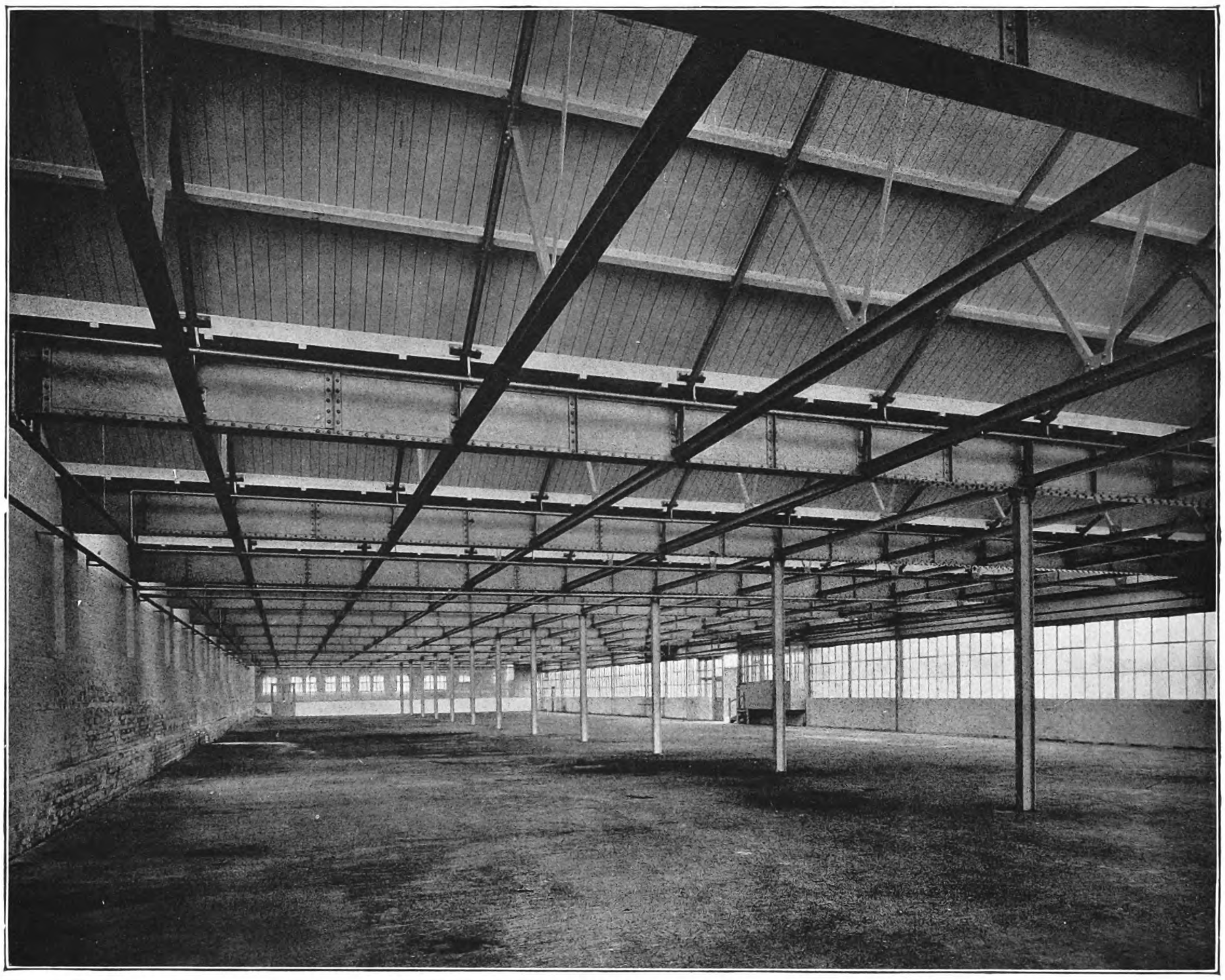

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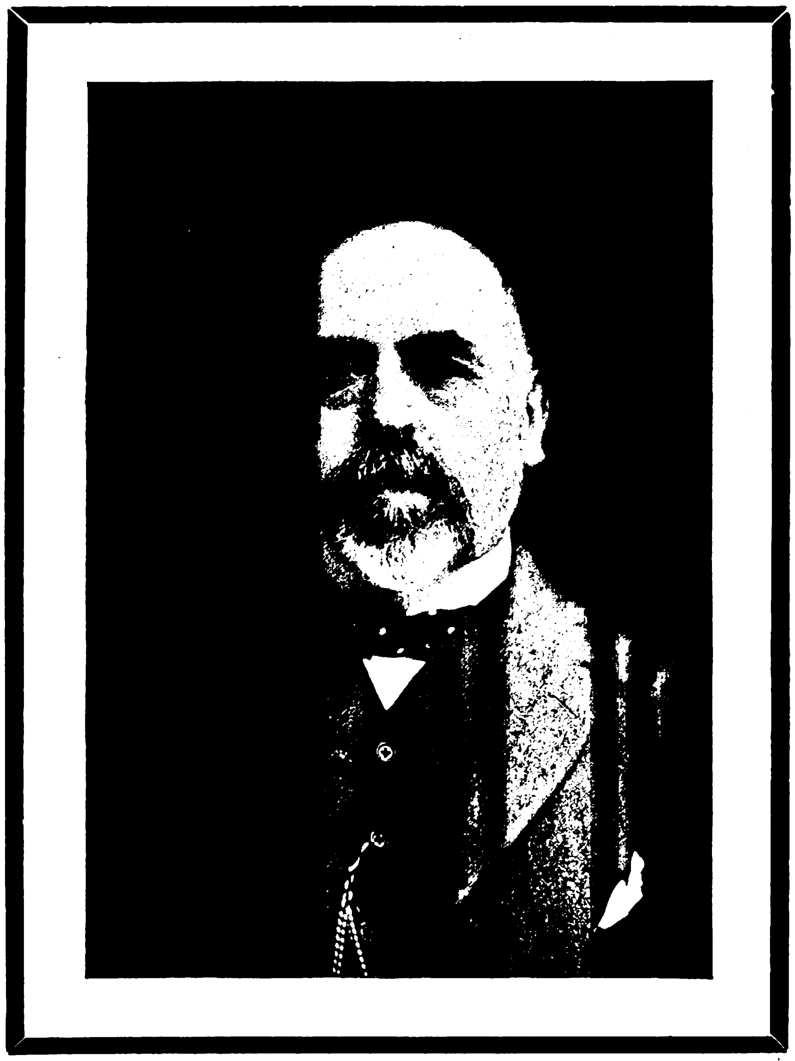
THE LATE MR. WALTER LEWIS SPIERS.

We greatly regret to note the death of Mr. Walter L. Spiers, which took place at Sir John Soane's Museum on 28 May. Mr. Spiers, of whom a portrait is given below, was born at Oxford in July 1848. On his election to a choristership at Magdalen College he entered Magdalen College School, and continued his education in the engineering department at King's College, London, in 1864.

He was articled to his brother, Mr. R. Phené Spiers, in 1866, in which year he joined the Architectural Association. During his studentship there he obtained first prize in the Class of Design and Sir William Tite's prize for a design for a town church. He also served the offices of President of the Class of Design and Vice-President of the Association, and was for some years Librarian. He became a student of the Royal Academy in 1868, and from 1870 to 1880 was in the office of Mr. Thomas Henry Wyatt, and of his son, Mr. Matthew Wyatt, with whom he afterwards went into partnership.

In connexion with the Royal Institute of British Architects Mr. Spiers passed the voluntary examination in architecture in 1870, obtained a silver medal for measured drawings of Eastbury Manor House in 1873, and in 1875 was elected an Associate. In 1887 he was appointed District Surveyor for Charlton, Lee, and Kidbrooke, under the Metropolitan Board of Works, and held this post also under the London County Council till his appointment as Curator of Sir John Soane's Museum, in succession to the late Mr. G. H. Birch, F.S.A., in 1904.



THE LATE MR. WALTER LEWIS SPIERS.

All who had occasion to consult Mr. Spiers in his official capacity found him invariably courteous and obliging. He was always unsparing in his efforts to elucidate a difficulty for a troubled inquirer. It will be no easy task to supply the vacancy which he leaves at the Soane Museum.

Mr. Spiers had been for many years an enthusiastic student of London topography, and did very useful work as a member of the London Topographical Society, of which he was for some time a member of council. He was elected a Fellow of the Society of Antiquaries in January 1916.

Mr. Spiers was also an enthusiastic volunteer, and was for many years a member of the Artists' Corps, in which he rose to be captain of his company, and for four years held the post of musketry instructor, retiring with the honorary rank of major.

A devoted Churchman, with a considerable knowledge of church music, he was connected for many years with St. Andrew's Church, Wells Street, and for the last two years acted as honorary church treasurer.

NOTES OF THE MONTH.

War Memorials in York Minster.

The following memorandum with respect to war memorials has been issued by the Dean and Chapter of York Minster:—It is most natural that in these sad days of bereavement and loss, lit up as they are by daily deeds of splendid courage and heroism, numbers of parents and friends of those who fall in battle should desire some memorial to be erected in the Minster whenever it is possible to show any claim to that great distinction. It is obvious that this raises questions of a serious nature and of great difficulty, as well as situations of considerable delicacy. On the one hand there is the desire to meet with every effort of sympathy the wishes of the bereaved. On the other hand there are plain facts to be faced, as: 1. The Minster walls have already been so generally utilized for the erection of monuments and tablets that there is comparatively little space left, and this must be jealously safeguarded and conserved. 2. In so glorious a church nothing but the very best that contemporary art can produce should be allowed, and this means that any worthy monument will be very costly. 3. Intensely interesting as the individual heroic acts of our men at the Front are to ourselves and to the present generation, it is doubtful whether anything should be publicly commemorated in the Minster which is not of sufficient importance to deserve and to evoke permanent and national interest. 4. The Minster is not only the pride of the city of York and the cathedral of the diocese, but it is also the metropolitical church of the Northern Province and a great national treasure-house, and therefore something far more than mere local connexion with the Minster would seem to be required before a proposal to make a permanent commemoration within its walls is made. 5. The War is not yet at an end, and it is obviously unwise to be filling up space piecemeal before we are in a position to take a comprehensive view of what will be required by way of commemoration of the thousands of officers and men of the North who have given their lives for their country. The Dean and Chapter are therefore not prepared as a rule to come to any decision about mural tablets or monuments till the War is over. In view of these considerations and facts the Dean and Chapter have laid down certain regulations which will be available for the guidance of those who may be contemplating the proposal of memorials.

The Victoria and Albert Museum as Education Offices.

Presumably the conversion, or perversion, of the Victoria and Albert Museum into Education Offices is only a temporary expedient. It is nevertheless regrettable. Government has set a very bad example in the misuse of buildings; and where the Government leads, the municipalities will follow. To wrest a building from the purpose for which it was erected is to defy one of the fundamental principles of architecture, and, indirectly, to encourage designs that are insipid and soulless. An architect would lose much of his inspirational force if at every step he was daunted by the knowledge that his museum might be used as an education office, his college chapel as a chemical laboratory, his town mansion as a motor garage. Like the water-demon who, in one of R. L. Stevenson's South Seas stories, exclaimed, "I grow bulky!" and sank the boat into which he had climbed in the semblance of a man of ordinary weight and stature, the education question has suddenly swollen to gigantic dimensions, and demands proportionate accommodation. That it should have taken lodgings in the Victoria and Albert Museum is particularly unfortunate, seeing that the public must consequently be denied access to the educational exhibits—those illustrating the applications of art to industry—which, at the present juncture, it is most essential to study.

* * *

The Institute of Scottish Architects.

A hearty welcome will be extended to the newly formed Institute of Scottish Architects, which has just held in Edinburgh its first annual convention. Those who have wondered why Scotland should have been so laggard in this matter will be somewhat reassured by the statement that an Architectural Institute was founded in Scotland in 1850. That it lasted rather less than a score of years is perhaps explicable on the ground that it was not a purely professional body. Of its first list of 170 members only thirty-three were architects, and its activities seemed mainly confined to the collection of topographical records. Societies so constituted are not remarkable for longevity, and may be said to contain within themselves from the outset the elements of disruption—a word of might in Scotland, where, according to the ancient jest, there are not only frequent splits, but split splits, and split-splitted splits. From that fate we trust that the new Institute will be always immune. It has in it all the elements of stability. Its first president, Sir Rowand Anderson, was an ideal selection; and he could have had no more worthy successor than Sir John J. Burnet. With a decidedly strong council, and with the benediction of the R.I.B.A., the Scottish Institute makes a most auspicious commencement, and we very cordially wish it all possible success.

* * *

Charing Cross Railway Bridge.

Last month the House of Lords passed the second reading of the Bill empowering the South-Eastern and Chatham Railway Company to strengthen the Charing Cross Bridge at a cost of £167,000. Fifty-three noble lords voted for the Bill and nineteen against it. No more favourable result was to be expected. Viscount Chilston, in moving the second reading, argued in the strain with which we are already too familiar; nor was there anything very fresh in the pleadings of the opposition, which, however, was very ably conducted by the Earl of Plymouth, the Marquis of Crewe, Earl Curzon, and Lord Courtney. The Earl of Plymouth thought it was not too much to ask the company to hold their hands for two years after the War, to enable persons who were deeply interested in this subject to arrange a scheme for the improvement of London at this spot. He meant, of course, that time was required, not to devise a scheme, but to raise the necessary funds and to obtain the necessary authority for putting it into execution. An argument that has had more weight than its intrinsic value warrants is that the opposition could and should have been ready long ago with its plans and its money for the replanning which it urges as an alternative to the bolstering up of this ugly and decayed old bridge. There can be but little sincerity in such a contention, for those who put it forward must know right well how difficult it is, and how long a time it takes, to overcome the inveterate apathy upon which they have somewhat cynically relied for their present inglorious success.

* * *

North Wales Heroes Memorial.

A meeting representative of all the public bodies in Wrexham and East Denbighshire has been held at the Guildhall, Wrexham, to stimulate interest in the movement initiated by Mr. R. J. Thomas, of Holyhead, to commemorate the men of North Wales who have fallen in the war by erecting new science buildings in connexion with the University College of North Wales, Bangor. Mr. R. J. Thomas opened the fund with a subscription of £20,000, and is giving his whole time and energy to the campaign as honorary secretary. An executive committee representative of each county in North Wales and of London, Liverpool, and Manchester has been appointed, and the meeting at Wrexham was one of a series of county meetings called with the object of inaugurating a movement to raise £20,000 towards the scheme as a county contribution. Of this sum East Denbighshire is expected to raise £10,000.

* * *

The Amenities of Golden Square.

Upon the announcement of an intention to build a theatre of varieties in Golden Square, the inhabitants have sent a formal protest to Westminster City Council. They are perhaps all the more jealous for the amenities of the square because, in accordance with a special Act of Parliament passed in the reign of George IV, the tenants are empowered to elect trustees to levy a small rate for the upkeep of the garden, for the painting and repair of its railings, and for the preservation of the insignificant statue of George II which stands in the middle of the garden, and is said to have been brought from the seat of Lord Chandos at Canons, near Edgware. It would be rather an exceptional statue if it had not been ejected from some former site; and, regarding it quite candidly, one suspects in the Chandos family a vehement desire to send it away as far as possible from Canons. Golden Square, which lies just off Regent Street, was built in 1684, and possibly the houses which would have to be cleared away to make room for the theatre are of that date. Although the square is now mainly occupied by wool-merchants, it was at first a "residential" quarter, and the list of its distinguished inhabitants includes Lord Bolingbroke (when he was Secretary-at-War), Mrs. Cibber the vocalist, and Angelica Kauffmann, the first lady member of the Royal Academy. Possibly it was while she was living here that Reynolds painted her portrait, which Bartolozzi engraved. Childs, who had been valet to Lord Byron, was beadle of the square as late as 1875. The square is mentioned in Smollett's "Humphrey Clinker," James and Horace Smith's "Rejected Addresses," and Dickens's "Nicholas Nickleby."

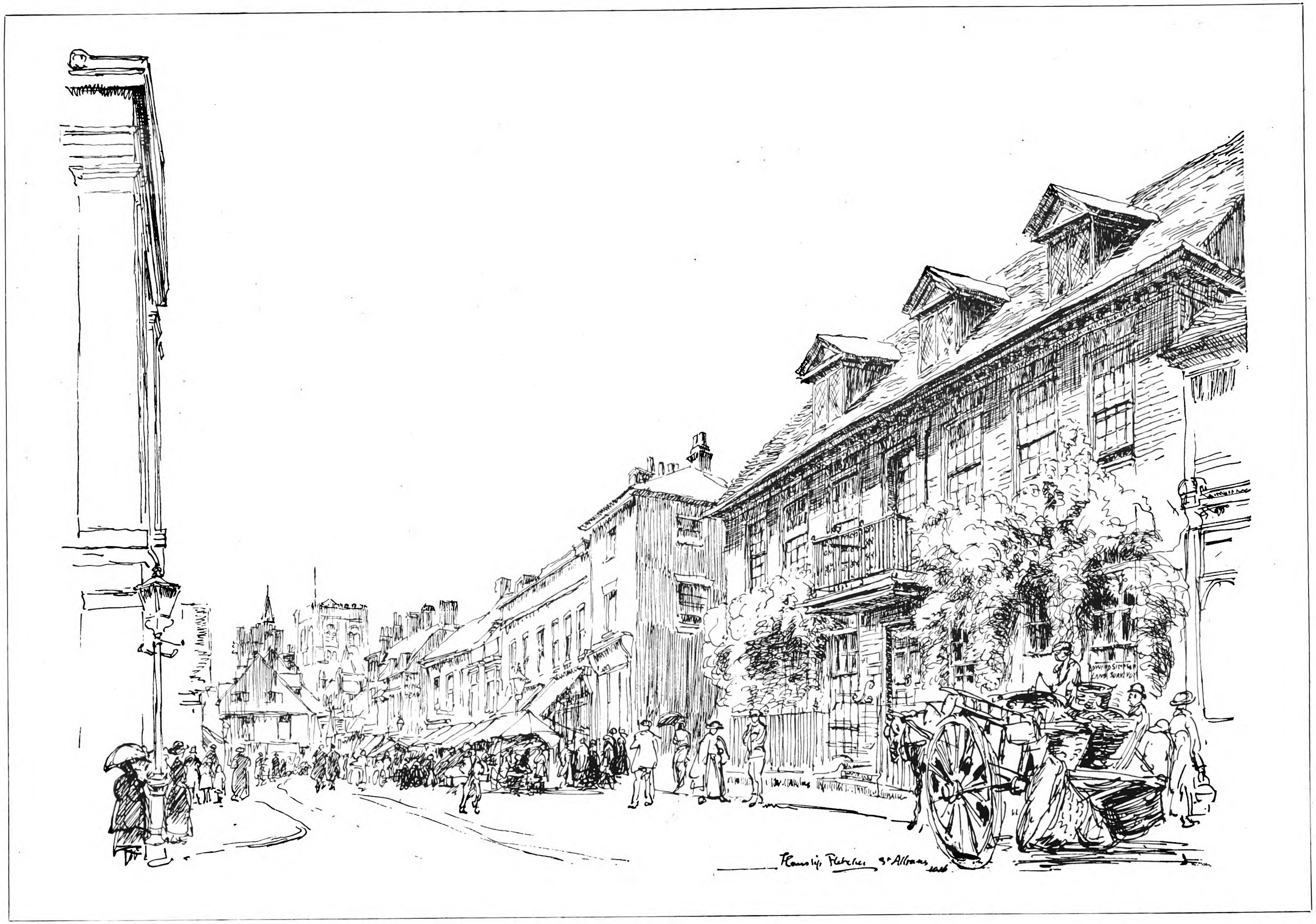


Plate I.

August 1917.

ST. PETER'S STREET, ST. ALBANS, LOOKING TOWARDS THE MARKET PLACE.

From the pen-and-ink Drawing by Hanslip Fletcher.

SMALL HOUSES AND COTTAGES AT ST. ALBANS.—I.

Illustrated by Photographs taken by Mr. W. R. L. Lowe and others.

When Verulam stood,
Saint Albans was a wood;
But now Verulam's down,
Saint Albans is become a town.
Traditionary Rhyme.

THE pilots of the Royal Flying Corps who wing their way over the cathedral city of St. Albans obtain a view of the four main thoroughfares characteristic of its growth that is denied to those whose pursuits centre among the intimate features of the place. Perhaps in the brief moments of normal flight, when the air is still and the controls are easy, they glance down on the square tower of the Abbey Church and note the red-tiled roofs, tidy gardens, and foliage blended harmoniously into a pattern of rich tints. To the south-east they see the serried streets of Fleetville, with its crop of factories, happily separated from the historical portions of the city, and from a height bereft of some part of its monotony. Those to whom such facilities are unusual have the alternative of ascending the narrow spiral staircase of the Clock Tower, in the centre of the city, and, from the flat top, of viewing a wonderful panorama which, considering the limited elevation, has compensations. There is yet another method of laying siege to the local topography, namely, by making reference to the plans published for the guidance of our forbears. It will be argued that a study of plans has little in common with the subject under discussion, but reflection will show such procedure to be necessary if the growth of the city and the building of the houses during three centuries is to be understood in sequence.

One of the earliest of these plans was drawn up by Benjamin Hare, presumably a citizen of London, in 1634, with the object of showing the bounds of the borough, which had lately been confirmed under the charter of Charles I. In 1700 a pictorial plan was drawn up by John Oliver, and inserted in Chauncy's "History of Hertfordshire," showing the principal streets, the outlying villages of St. Michael's and St. Stephen's, as well as indicating the tendencies of certain of the inhabitants to build at the four extremities of the main thoroughfares away from the mediæval centre (see Fig. 2).

On page 51 of "Britannia Depicta, or Ogilby Improved," there is a map of the main road from London to Holyhead, showing St. Albans as an incident, but this is of little value from a topographic standpoint; it is of interest, however, when read in conjunction with Oliver's detailed representation of the place. A large plan of St. Albans was prepared by J. Andrews and M. Wren in 1766, giving the streets and buildings in detail, and is valuable for several reasons, inasmuch as it shows the inn-yards on the south side of Holywell Hill, the opening of a new road directly south from the Market Cross, connecting by a quadrant to the old London Road, and a considerable increase in building on both sides of Fishpool Street towards St. Michael's. At this period the backs of the houses on both sides of the way in St. Peter's Street, Holywell Hill, and Fishpool Street looked over open country (see Fig. 3). In 1810 a very accurate plan was produced by E. W. Brayley, in which further alterations and improvements are discernible, such as the extension of the new road from the Market Cross to meet the old London Road some three-quarters of a mile farther south. At this period very little seems to have been

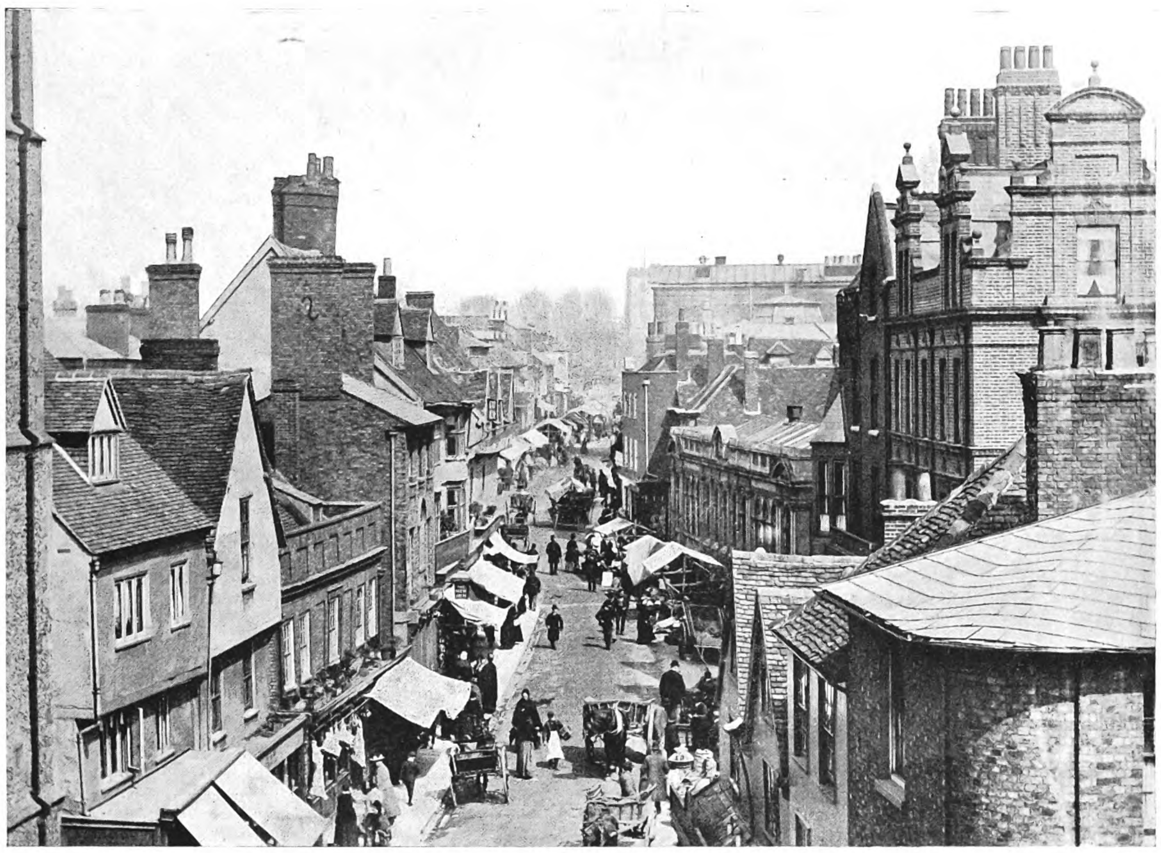


Fig. 1.—VIEW OF THE MARKET PLACE.

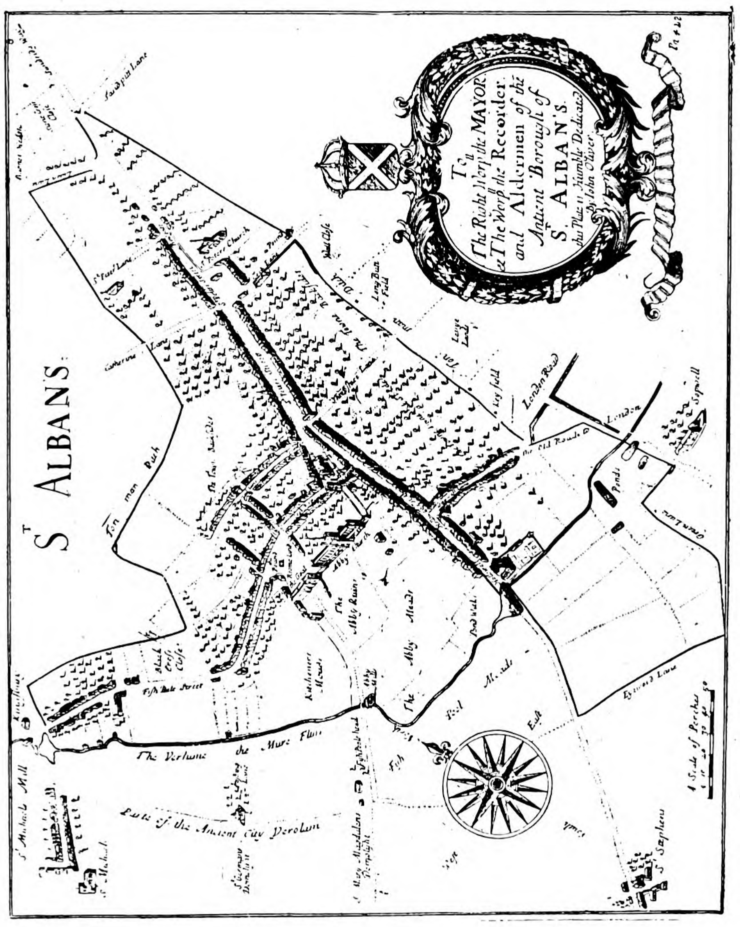

Sᵀ ALBANS
To The Right Worp.ll the MAYOR the Worp.ll the Recorder and Aldermen of the Antient Borough of Sᵀ ALBAN'S
The Verlume
London Road

Fig. 2.—MAP FROM CHAUNCY'S HISTORY OF HERTFORDSHIRE, A.D. 1700.

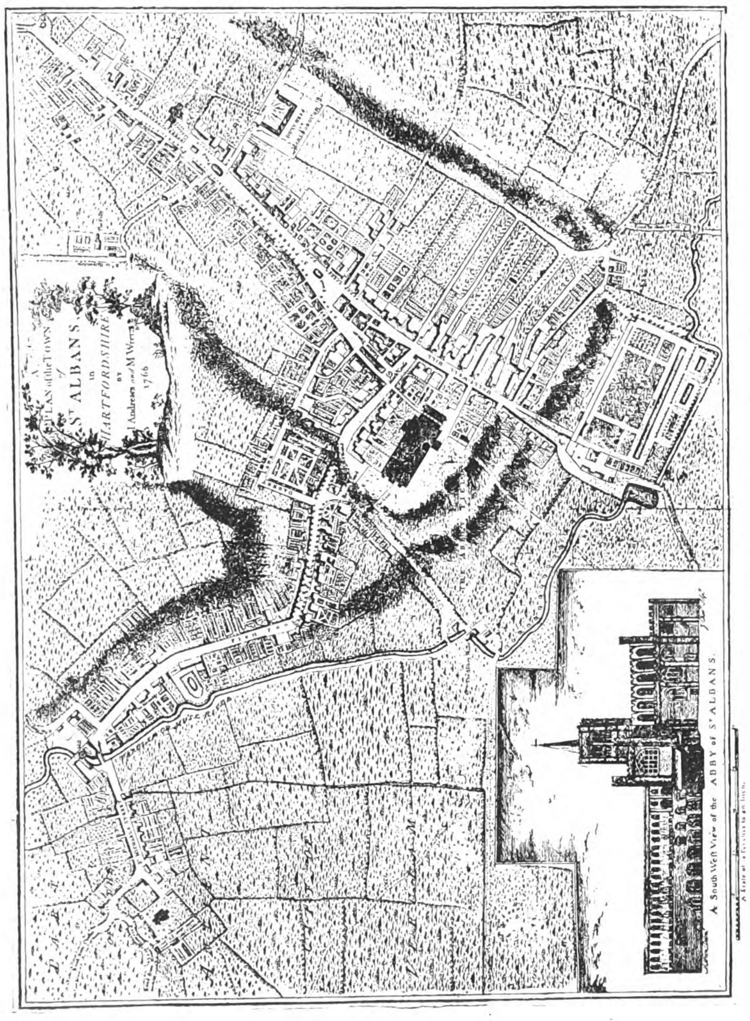


Fig. 3.—MAP OF ST. ALBANS IN 1766.

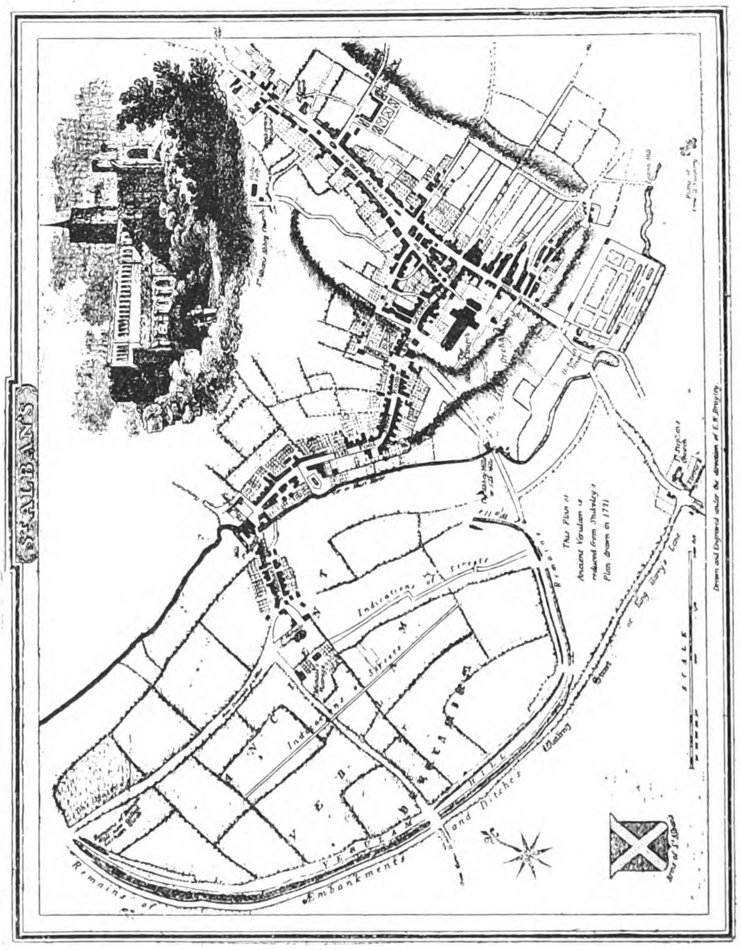


Fig. 4.—MAP OF ST. ALBANS IN 1810.

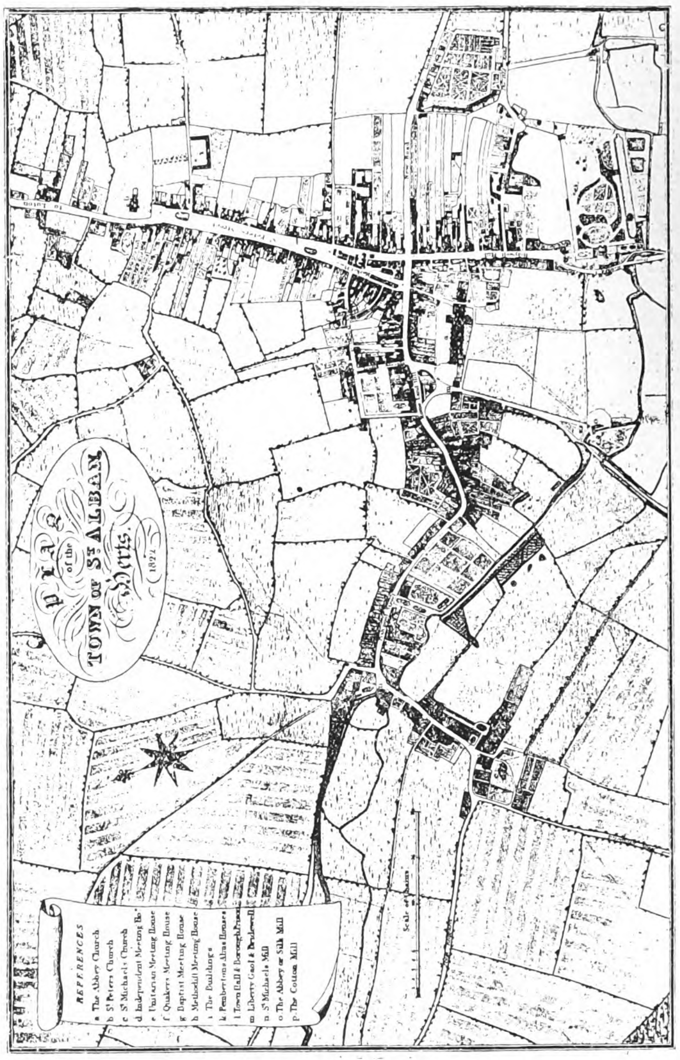


Fig. 5.—MAP FROM CLUTTERBUCK'S HISTORY OF HERTFORDSHIRE, A.D. 1822.

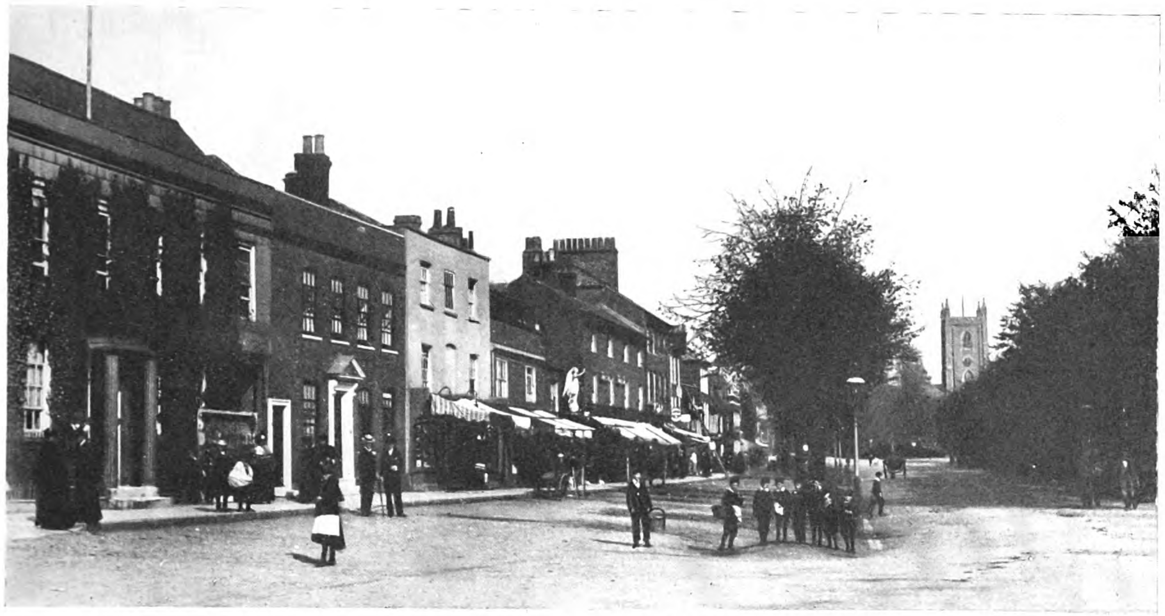


Fig. 6.—ST. PETER'S STREET.

attempted in the way of building houses far from the centre of the town, although judging from the architectural character of the streets many fifteenth-century buildings were refronted in the late Georgian taste, and gardens were sacrificed to meet the demand for accommodation (see Fig. 4).

Clutterbuck's "History of Hertfordshire," published in 1822, contains a map by T. Godman; a few years later Telford effected the improvement which carried the coach road from a point above the "Red Lion," past the rear entrance of the "George," and out beyond the town through open fields to meet the old road to Redbourn. Previously the coach and other traffic, both north and south, had run through Fishpool Street, with the exception of that from Reading to Bedford or vice versa, which traversed Holywell Hill and St. Peter's Street (see Fig. 5). This plan of 1822 does not indicate many new buildings other than a few houses along the new London Road, which possibly included the bay-windowed taproom to the old "Peahen," which, happily, still smiles on the traffic in the new London Road.

Curiously enough, during the late seventeenth and eighteenth centuries the development of building in St. Albans was limited to the erection of stately dwellings for the richer class of residents, and the refronting of mediæval buildings in Fishpool Street and St. Peter's Street for the townspeople; the shopkeepers of those days lived over their businesses. With the increase of the coaching traffic at the beginning of the nineteenth century, and the improvements to the main road by Telford, a further development took place, which resulted in an extension of the earlier architectural tradition blended with the fashions of the Regency. In fact, even as late as 1837 the vernacular style for cottage buildings in St. Albans corresponded very closely to early eighteenth-

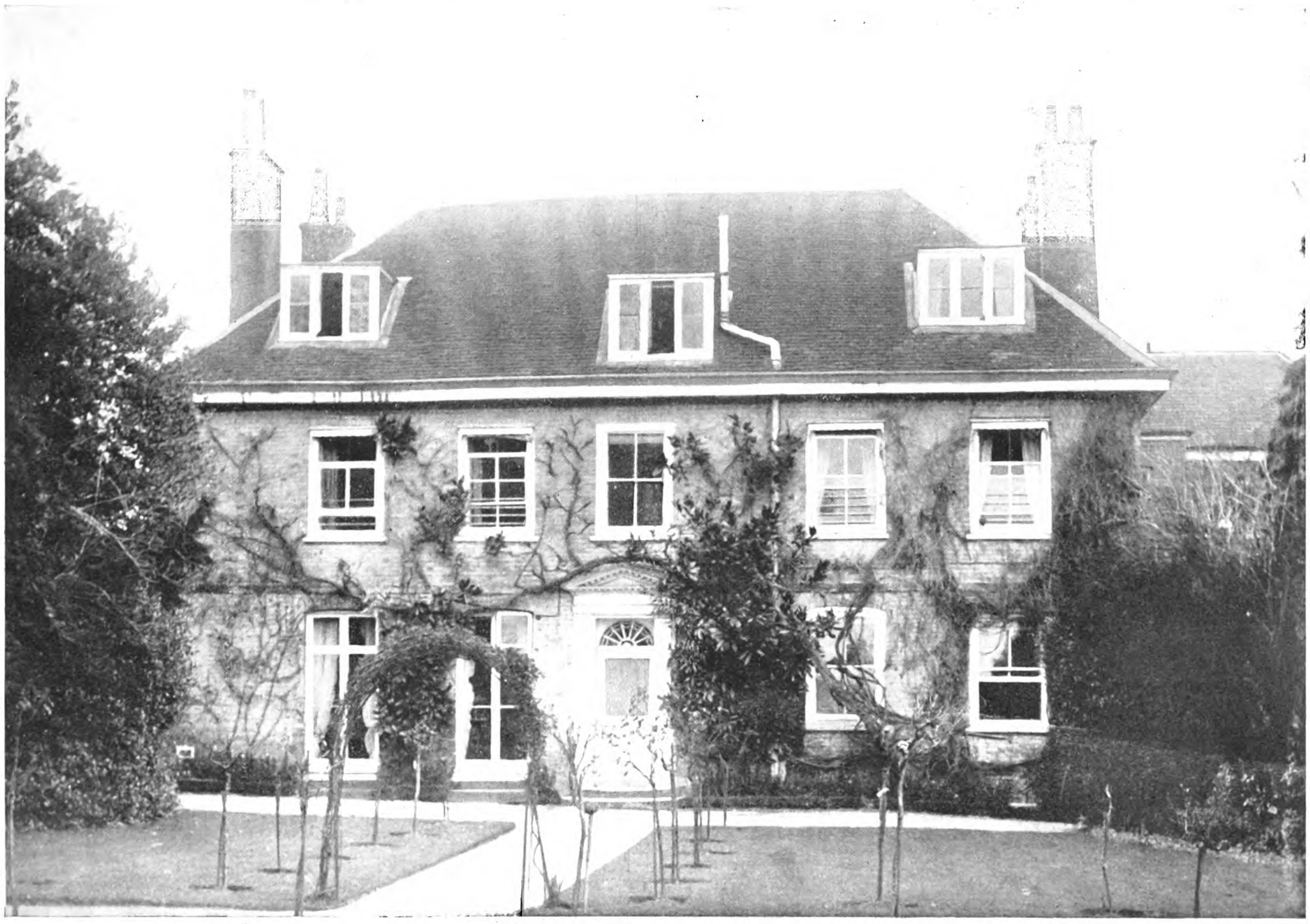


Fig. 7.—DARROWFIELD HOUSE, ST. MICHAEL'S.

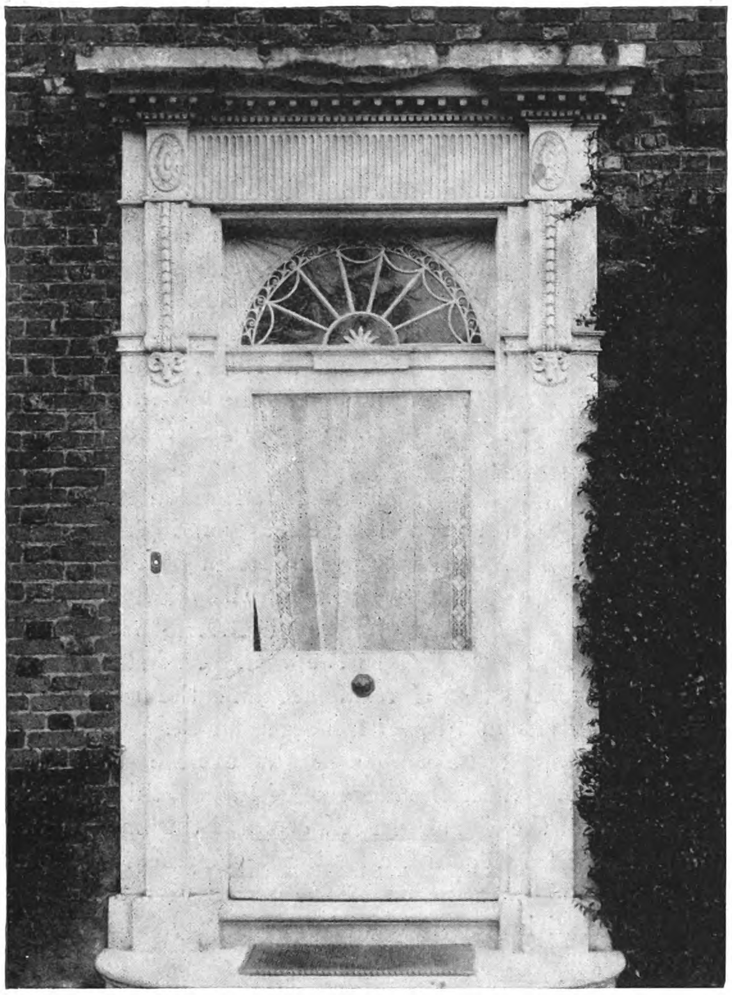


Fig. 8.—DARROWFIELD HOUSE, ST. MICHAEL'S: LATE EIGHTEENTH-CENTURY ENTRANCE DOOR.

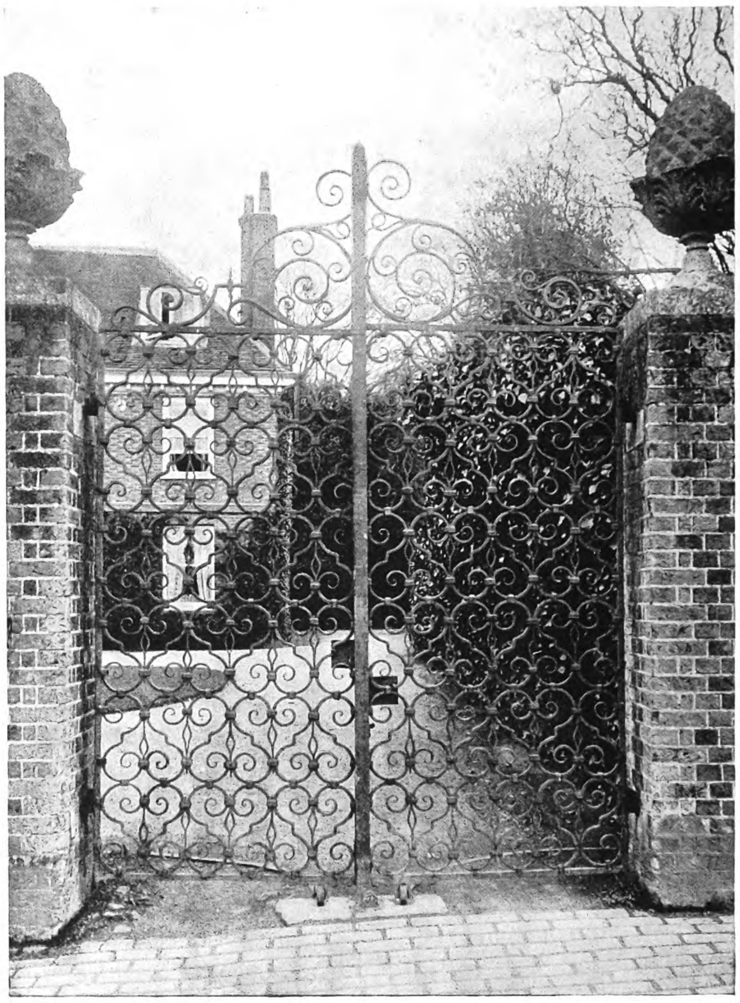


Fig. 9.—DARROWFIELD HOUSE: THE ITALIAN GATE.

century methods, particularly in regard to the employment of outside wooden frames for sash-windows. This, however, must be referred to again when the individual buildings are considered.

At the beginning of the last century the people of St. Albans relied to a very large extent on the volume of coach traffic for their means of livelihood. Other industries, such as the breweries, the silk and cotton mills, as well as the straw-plaiting trade, afforded occupation to many of the people. From 1804 to 1820 numerous brick cottages were erected by local builders and carpenters on sites once given to gardens to accommodate industrial workers, and various other improvements were effected in the junctioning of the streets. To this period belongs the timber addition to the Silk Mill and the distinguished Independent Meeting House in Spicer Street, which was built in 1811.

In 1810 the chief promenade for the townspeople was along the new London Road, a characteristic which has been maintained for over a century, and one explaining the development of building in a southerly direction which took place between the years 1815 and 1830. Architectural character in St. Albans during the seventeenth and eighteenth centuries

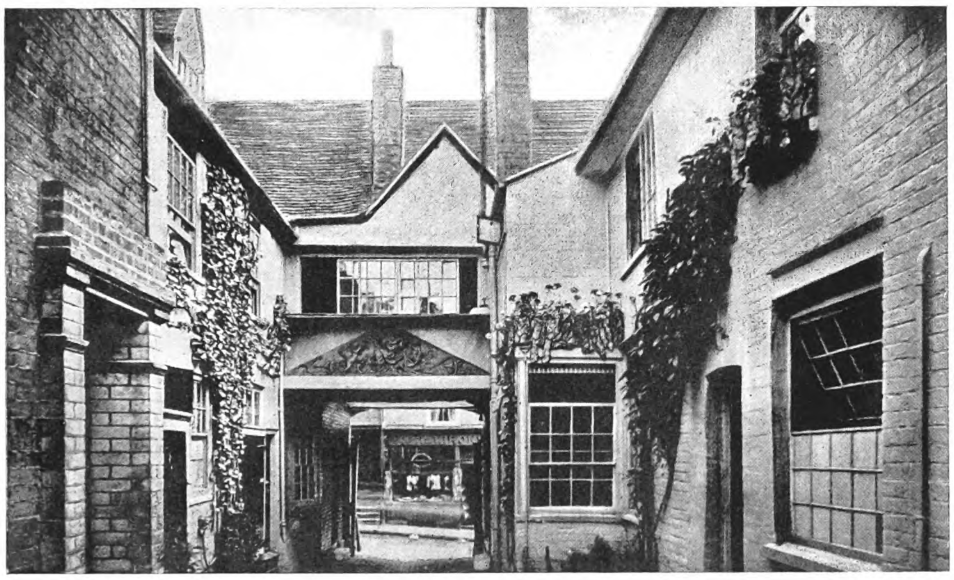


Fig. 10.—COURTYARD OF THE GEORGE INN.

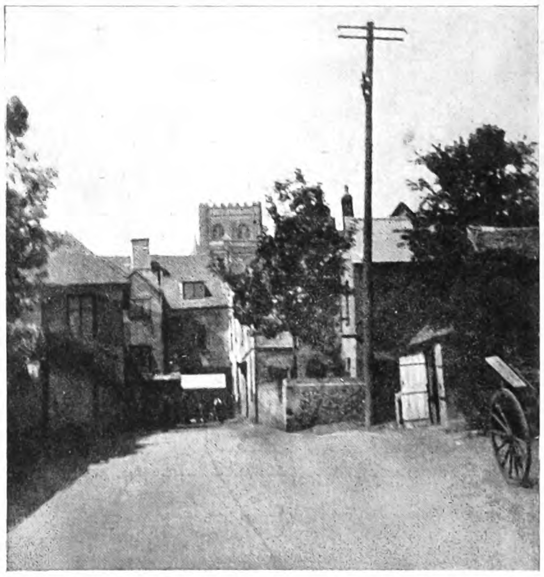


Fig. 11.—BACK OF THE "WHITE HART."

reflected the taste of the whole county. Both the town and the county drew inspiration from the Metropolis, and what is peculiar in the treatment of the homely façades of the mansions in St. Peter's Street was common to the great houses of Tyttenhanger, Aldenham, Harpenden, and Redbourn. The names of the builders who wrought in those days have not been recorded, but it is known that Sir Christopher Wren's master mason, Edward Strong, built a house for himself opposite St. Peter's Church, and one externally thoroughly expressive of its day. It is also known that Vandermeulen, the Dutch Court painter, built the mansion on Romeland Hill and imported special bricks from Holland for the architectural features, such as the cornices, string-courses, and voussoirs. Earlier than this we have the beautiful house, No. 1 St. Peter's Street, which is expressive of the late Stuart period. Darrowfield House, St. Michael's, for years known as the "New House," belongs to the early part of the eighteenth century (see Figs. 7, 8, and 9). The wrought-iron gates of late seventeenth-century date were imported from Italy in the middle of the last century, and the entrance doorway was added at a date corresponding with the erection of the mansion at Gorhambury by Sir Robert Taylor, about 1780. To this period belongs the fine stock-brick house on Holywell Hill, in which the hand of Sir Robert Taylor can also be traced. The larger houses of St. Albans, including the above-mentioned houses on Romeland Hill and Holywell Hill, formed the subject of a previous article (see THE ARCHITECTURAL REVIEW, August 1912), and were fully illustrated; therefore it has been thought proper to eliminate them from the present discussion.

The view of the Market Place at St. Albans (see Fig. 1) shows to what extent the eighteenth-century refronting altered the character of the mediæval houses; and reference to the view of the north side of St. Peter's Street shows how the same process was continued from 1700 to 1820 (see Fig. 6). A typical house-front of the late seventeenth-century period is given in Fig. 12. The aspect of the courtyards of two important coaching inns can be judged from Figs. 10 and 11. The first is a view of the "George," and the second shows the back of the "White Hart" on Holywell Hill.

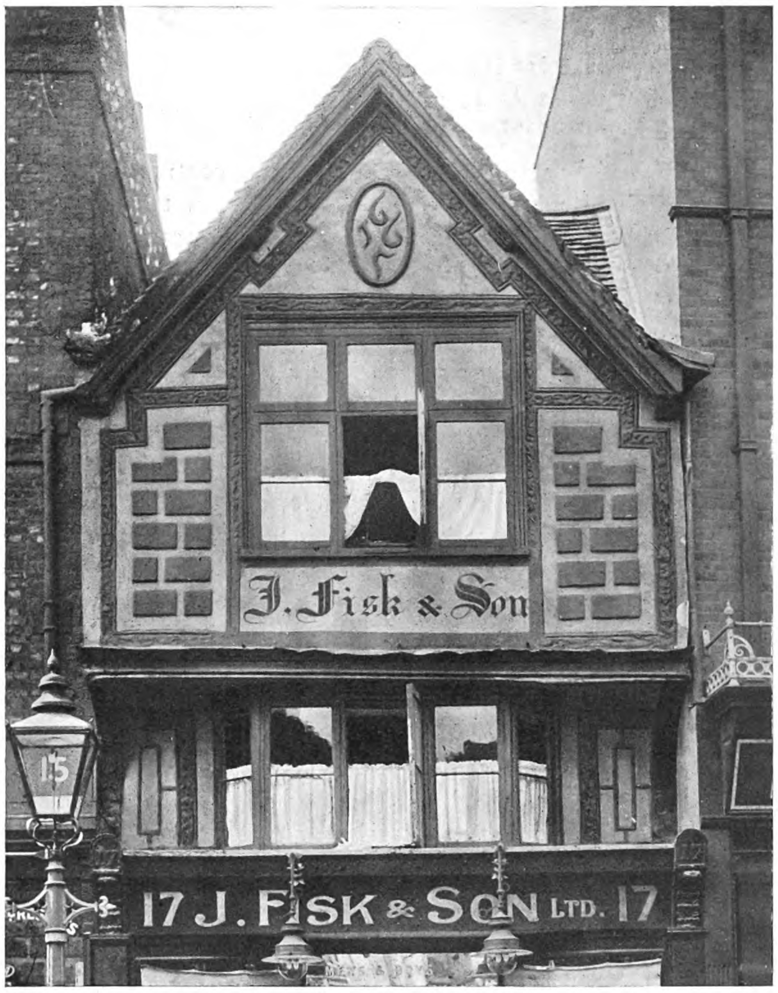


Fig. 12.—TYPICAL SEVENTEENTH-CENTURY HOUSE FRONT.

Turning from the centre of the town to the outskirts in search of cottage buildings, we encounter Fishpool Street, which, viewed from its lower extremity, presents one of the finest examples of picturesque formality in the kingdom (see Fig. 13). In the main, these cottages are the original sixteenth and seventeenth century and earlier structures, with eighteenth-century fronts added to bring them up to date.

Mr. Hanslip Fletcher's delightful pen-and-ink drawing, which forms the frontispiece to this issue, has another interest beside that of draughtsmanship, for it happens to include, on the right, the fine Stuart period house to which reference has already been made, and which, we are pained to learn, is threatened with demolition. The excuse for this projected act of vandalism is that it will enable a modern "improvement" of some sort or another to be effected. We sincerely hope that strong protest will be made against the destruction of this house, which is a precious relic of a period of which examples are by no means numerous. In the breadth of treatment displayed in its design clear evidence is discernible, as a writer has said, "of the fine style which was subsequently developed. The projecting balcony over the central doorway is one of the earliest of its kind, and the number of the quarries in the heavily sashed windows serves as an index to the period of its erection."

(To be concluded.)

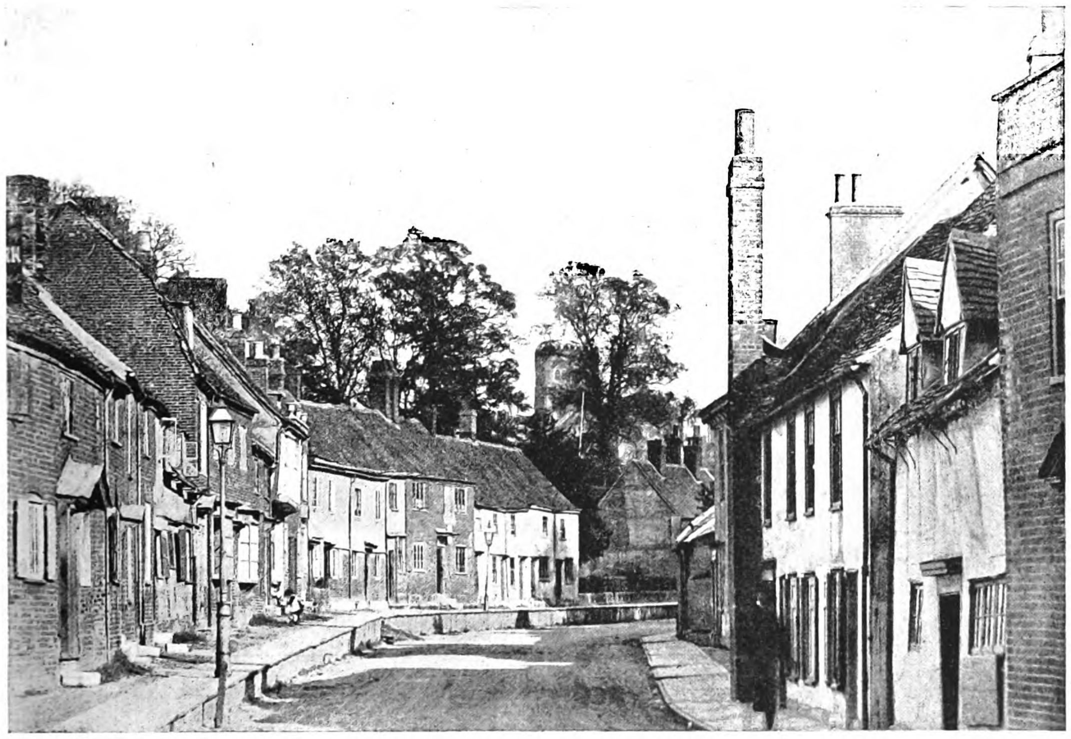


Fig. 13.—FISHPOOL STREET.

THE ROYAL EXCHANGE, LONDON.—I. THE FIRST BUILDING.

By ARTHUR STRATTON, F.R.I.B.A.

A CITY without an Exchange lacks a centre: it is like a wheel without a hub. In times not remote the Exchange was the recognized place of assembly for all merchants, where day by day they met to transact their business. It thus played a large part in the communal life of a city, and the extent and architectural character of the Exchange were in some measure an indication of the commercial enterprise and prosperity of the citizens. Yet London, in spite of the position it occupied amongst the great trading centres of Western Europe, boasted no building set apart exclusively to the uses of an Exchange till the reign of Elizabeth. Many Continental cities with which the merchants of London were at that time carrying on an extensive trade possessed their "Burse," but London characteristically bemoaned the need of a meeting-place, while putting up year after year with the inconvenience of having to do without one.

Stow, writing about 1570, records this state of affairs in the following passage in his "Annales": "The City of London beeing of very late yeares much increased in people and generall traffique with all Christian nations: so as at this time not onely the native Merchants and the retailers and shop-keepers were multiplied and encreased both in wealth and number, but also the City was wonderously replenished with great store of Merchants, strangers from many forraine nations . . . . whose confluence in London was now growne to an unknowne greatnesse in respect of former ages, all which Merchants and trades-men, as well English as strangers, for their generall making of bargaines, Contracts and commerce did usually meete twice every day in Lombard Streete; but forasmuch as their meetings were then unpleasant, and troublesome by reason of walking and talking in an open narrowe streete . . . . being there constrained either to endure all extreamities of weather, or else to shelter themselves in shoppes, for redresse whereof, upon good advice, the Citizens of London bought at divers times, houses and many small Tenements in Cornehill, and pulled them downe and made the ground faire and plaine to build upon, and then the Citie gave that ground unto sir Thomas Gresham, to the end hee should build a Burse or faire place for the assembly of Merchants, like to that of Antwerpe." *

Thus it was from Antwerp that the model of London's first Exchange was obtained, and it was through the spirited action of an individual merchant, as distinct from that of the Corporation, that the project was set on foot. It is to Sir Thomas Gresham that credit must be given for initiating the scheme that was eventually carried out. Although his father, Sir Richard, had previously contemplated the erection of an Exchange, nothing had resulted from his endeavours, because the site he favoured did not commend itself to the merchants, who urged that their meeting-place should not be far removed from Lombard Street. Sir Thomas, intent on his project and desirous of facilitating commercial relations with foreign cities, received every encouragement from his agent in Antwerp—in fact, this agent, Sir Richard Clough, spurred him on by correspondence, reminding him that in spite of the wealth of London the merchants there "must be contented to stand and walk in the rain, more like pedlars than merchants." "In this country," he proceeds, "and in all others, there is no kind of people that have occasion to meet, but ye have a place fit for that purpose. Indeed, and if your business were done, and that I might have the leisure to go about it . . . . I would not doubt, but to make so fair a Burse in London, as the great Burse is in Antwerp, without soliciting of any man more than he shall be disposed to give." This letter was written in 1561, and eventually Sir Thomas made the offer to the Corporation of erecting at his own expense a convenient building if a suitable site were provided for him. On 4 January 1564 Gresham's proposition was laid before the Court of Aldermen by his servant, Sir Anthony Strynger, and thankfully acceded to by them.* The City accordingly purchased about eighty houses which composed two alleys leading out of Cornhill into Threadneedle Street, cleared the site, and made it ready for the ceremony of laying the first stones on 7 June 1566.

Such a building being an innovation in this country, precedent for its plan and design was necessarily sought on the Continent, and naturally in a city with which many London merchants, and Gresham in particular, were familiar. The commerce of Antwerp had been gradually increasing during the fourteenth and fifteenth centuries, and when the quarrel between the people of Bruges and the Archduke Maximilian induced that ruler to blockade Sluys, the trade of the hitherto flourishing city of Bruges began appreciably to decline and that of Antwerp to increase. In the sixteenth century, Antwerp was the chief emporium of European commerce, and English merchants were much in evidence there. The Bourse there had been rebuilt in 1531, and, as seen in the bird's-eye view reproduced on Plate II, it consisted of a two-storied building surrounding a large open courtyard; the lower story provided a covered ambulatory with an arcade of trefoil-shaped arches on the courtyard side carried on sixty-two slender columns of *pierre bleue* variously carved. A tower containing a clock and bells rose to a considerable height on one side, and the picturesque character of the whole accorded admirably with the prevailing note of the Flemish city. That the plan disposition should have been followed closely by the builder of the London Exchange is not to be wondered at, but that the resemblance should have been maintained in the superstructure is evidence of the strong influence that the arts of the Low Countries were exerting upon the architecture of England during the latter part of the sixteenth century. Not only were the main lines of Gresham's building obviously inspired by this model at Antwerp, but workmen as well as materials were imported, and even the architect seems to have been a native of Antwerp. It is recorded of Henri de Pas or Paschen, a rival of Corneille de Vrindt, that in 1566 he gave the plan "de la Bourse des Marchands à Londres, construite de marbre de Rans en Hainault," followed two years later by the design of the Hôtel des Villes Hanséatiques at Antwerp.† That marble was used for the columns supporting the arcades round the courtyard is confirmed by the following extract from a description of the Exchange by an observant contemporary, who wrote: "The form of the building is quadrate, with walks round the mayne building

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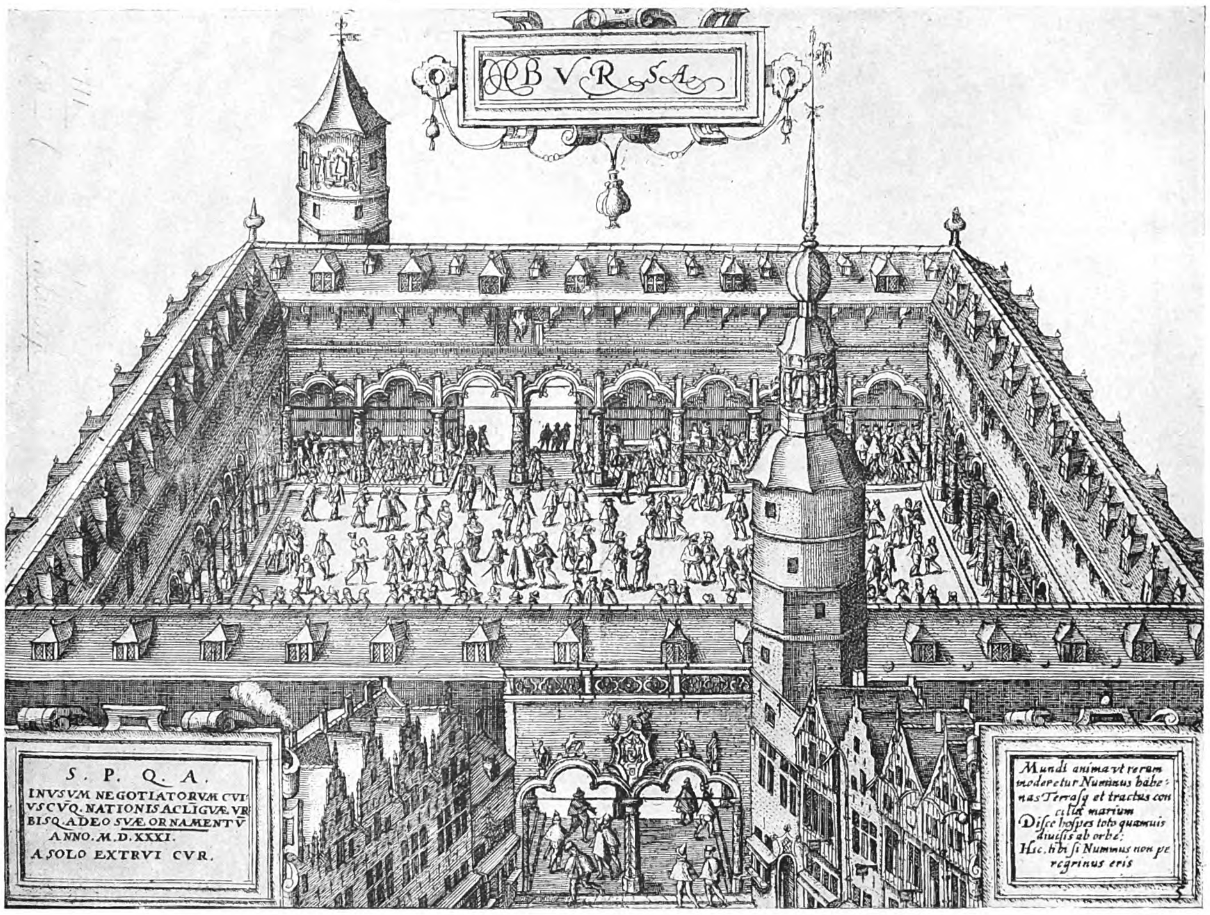
* "Annales, or a generall Chronicle of England." Begun by John Stow, continued by E. Howes. 1631.

* J. W. Burgon, "Life and Times of Sir Thomas Gresham," 1839.

† "Memoires sur les Sculpteurs et Architectes des Pays-Bas," by Philippe Baert, in the Commission Royal d'Histoire. Recueil des Bulletins, Bruxelles, 1848.


BVRSA
S. P. Q. A.
INVSVM NEGOTIATORVM CVIVSCVQ. NATIONIS AC LIGVÆ VRBISQ. ADEO SVÆ ORNAMENTV
ANNO. M. D. XXXI.
A SOLO EXTRVI CVR.
Mundi anima ut rerum moderetur Nummus habenas Terrasq et tractus con cilie marium
Disce hospes toto quamuis diuisis ab orbe:
Hic tibi si Nummus non peregrinus eris

BIRD'S-EYE VIEW OF THE EXCHANGE, ANTWERP, AS BUILT IN 1531.

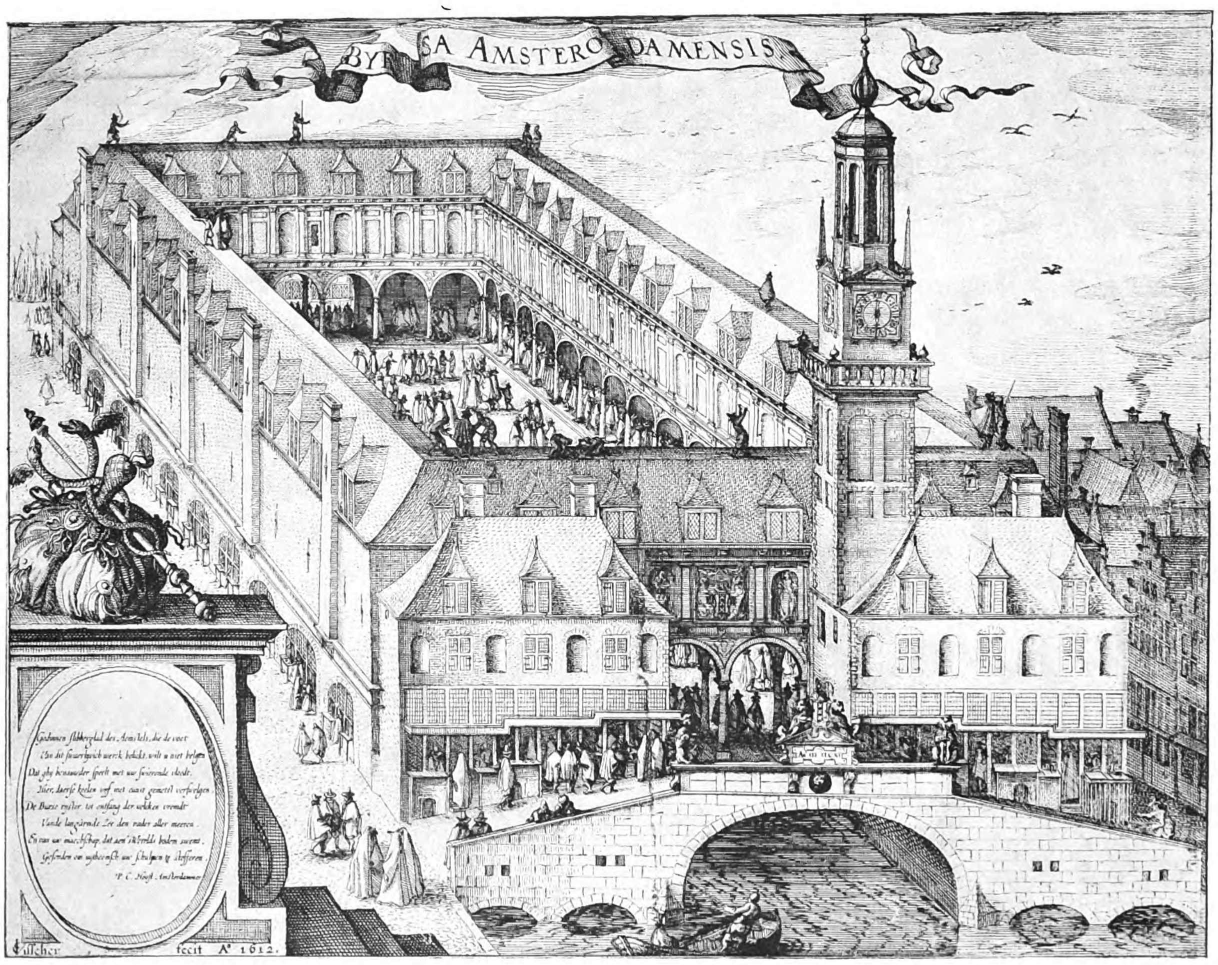
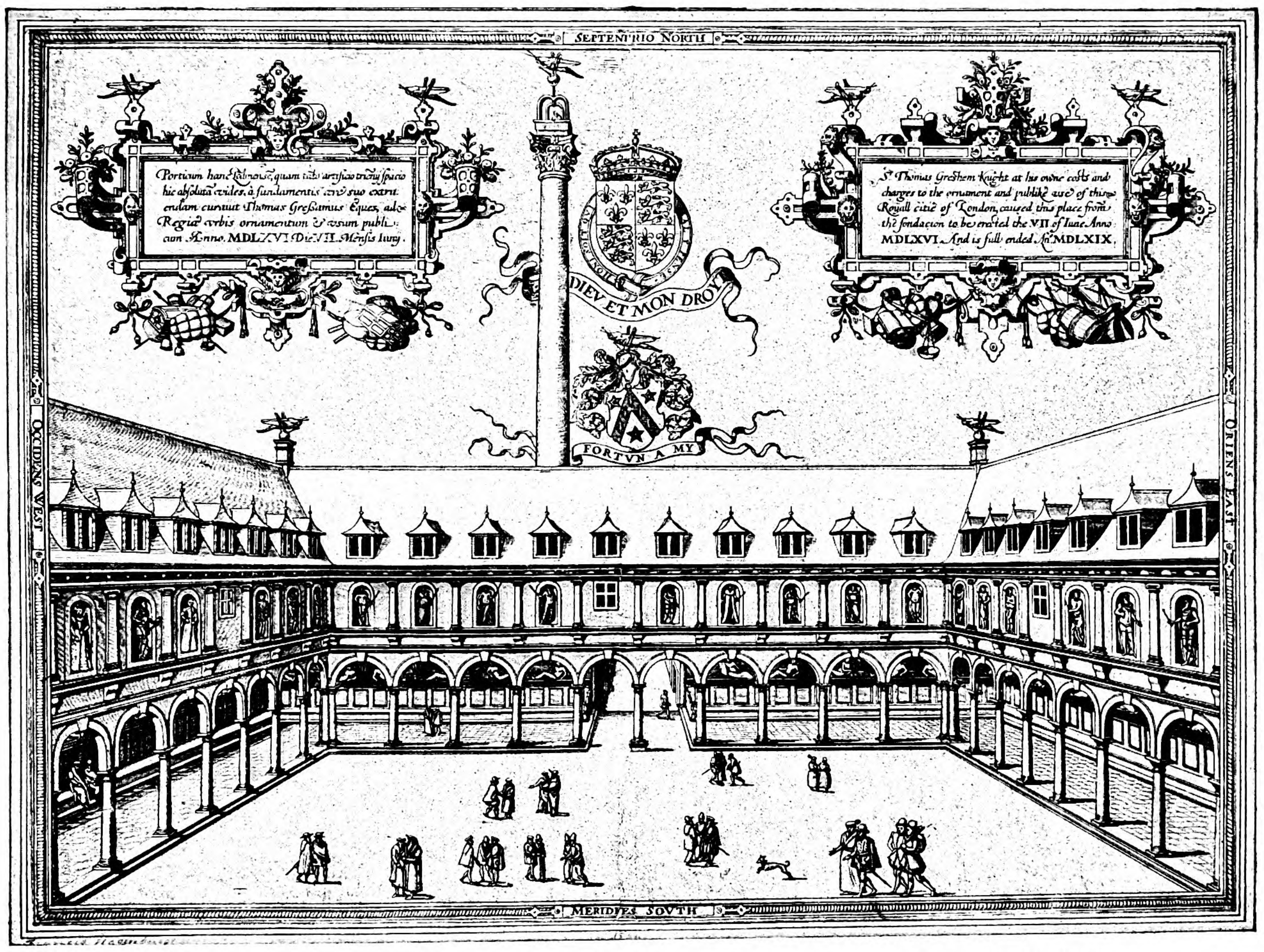


Plate II.

August 1917.

BIRD'S-EYE VIEW OF THE EXCHANGE, AMSTERDAM, IN 1612.

From an Engraving by Visscher.


SEPTENTRIO NORTH
Porticum hanc Ædibusq; quam tali artificio tricenij spacio hic absolutã vides, à fundamentis ære suo extruendam curauit Thomas Greshamus Eques, ad Regiæ vrbis ornamentum & vsum publicum Anno. MDLXVI. Die VII. Mensis Iunij.
St. Thomas Gresham Knight at his owne costs and charges to the ornament and publike use of this Royall citie of London, caused this place from the fondacion to be erected the VII of Iune Anno MDLXVI. And is full ended An. MDLXIX.
DIEV ET MON DROYT
FORTVN A MY
OCCIDENS WEST
ORIENS EAST
MERIDIES SOUTH

VIEW IN THE COURTYARD OF GRESHAM'S ROYAL EXCHANGE IN 1566.

From an Engraving by Francis Hogenburg, in the British Museum.

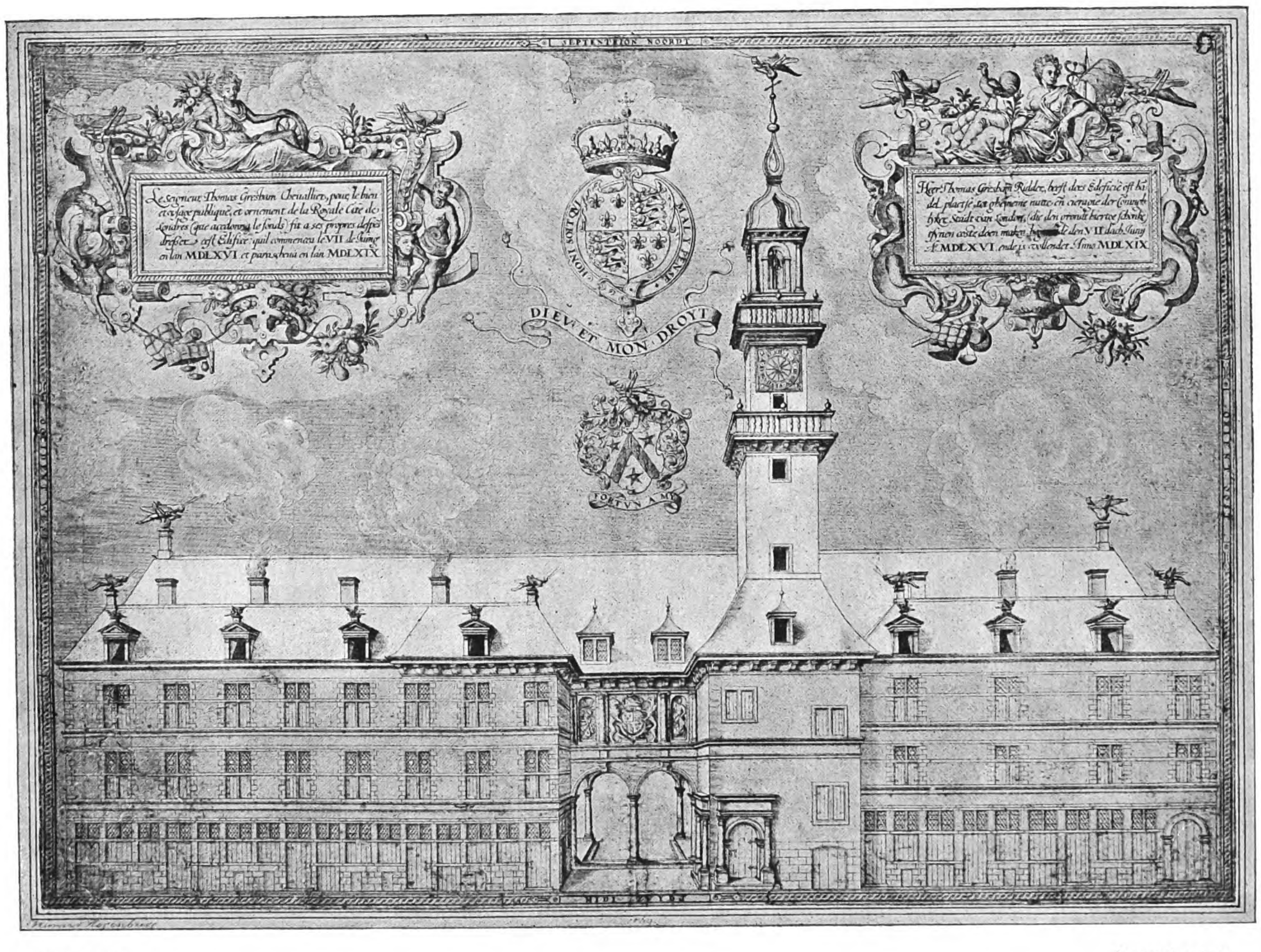


Plate III.

August 1917

EXTERIOR VIEW OF GRESHAM'S ROYAL EXCHANGE IN 1569.

From an Engraving by Francis Hogenburg, in the British Museum.

supported with pillers of marble."[*] The importation of building materials seems, however, to have been carried a good deal further than this, and Holinshed commented on this practice, seeing that most materials were procurable in the British Isles. "Slate of sundrie colours," he wrote, "is everie where in manner to be had, as is the flinte and chalke, the shalder and the peble. Howbeit from all this wee must fetch them still from farre, as did the Hull men their stones out of Iseland, wherewith they paved their towne for want of the like in England: or as Sir Thomas Gresham did, when he bought the stones in Flanders, wherewith he paved the Burse. But as he will answer peradventure, that he bargained for the whole mould and substance of his workmanship in Flanders; so the Hullanders or Hull men will saie, how that stocke fish is light loding, and therefore they did balasse their vessels with these Iseland stones, to keep them from turning over in their so tedious a voiage."[†] There was much correspondence between Clough, who remained in Antwerp, and Sir Thomas; in one of his letters he refers to "beying glad that you do so well lyke Henryke and that your works go so well forwards." This Henryke, whose other name does not occur, was doubtless a master-craftsman who journeyed between London and Antwerp for the purpose of securing materials and workmen. What Holinshed meant exactly by "the whole mould and substance of his workmanship" is not clear, as the building was for the most part constructed of brick with stone dressings. Timber construction, with which the native craftsmen were perfectly familiar, also entered into it, and Gresham in a letter speaks of his house at Ringshall (near Batisford, Suffolk), where "I make all my provision for any timber for the Bourse."

A comparison of contemporary engravings, such as those reproduced on Plate III, reveals the similarity between Gresham's Exchange and the Burse at Antwerp, especially in the treatment of roofs and the design of the tower. The grasshoppers seen on the top of finials, dormers, tower, and column, doubtless owe something to the zeal of the engraver in introducing the Gresham crest wherever there was an opportunity to do so, but it is certain that a large lead or copper-gilt vane in the form of a grasshopper—suggested by the fanciful vanes so much favoured in the Low Countries—was set up at the summit of the tower, even if one did not crown every ridge. Making allowances for the predilections of the engraver, the building appears to have been restrained in character and free from the meaningless ornament which disfigures so much work of Elizabethan times; in fact, the courtyard must have been quite impressive. The detached column before the north entrance does not appear in other engravings of London, which is remarkable, if it was ever built, as from its evident size it would have been a conspicuous object from all sides.

Although foreign craftsmen appear to have been engaged on much of the work, there was at least one English sculptor of note employed, for Nicholas Stone carved some of the statues of English sovereigns which filled the niches above the arcading. It was whilst Stone was working here that Hendrick van Keyser, architect and sculptor to the City of Amsterdam, was sent to London to study the Exchange, with a view to the preparation of the design for a Bourse at the rapidly rising port of Amsterdam. It thus came about that, in its turn, Gresham's Exchange influenced the design of that at Amsterdam, built between 1608 and 1613; and it would be difficult to cite more direct instances of the influence of one civic building upon another than are afforded by these three Exchanges, none of which has survived.[*]

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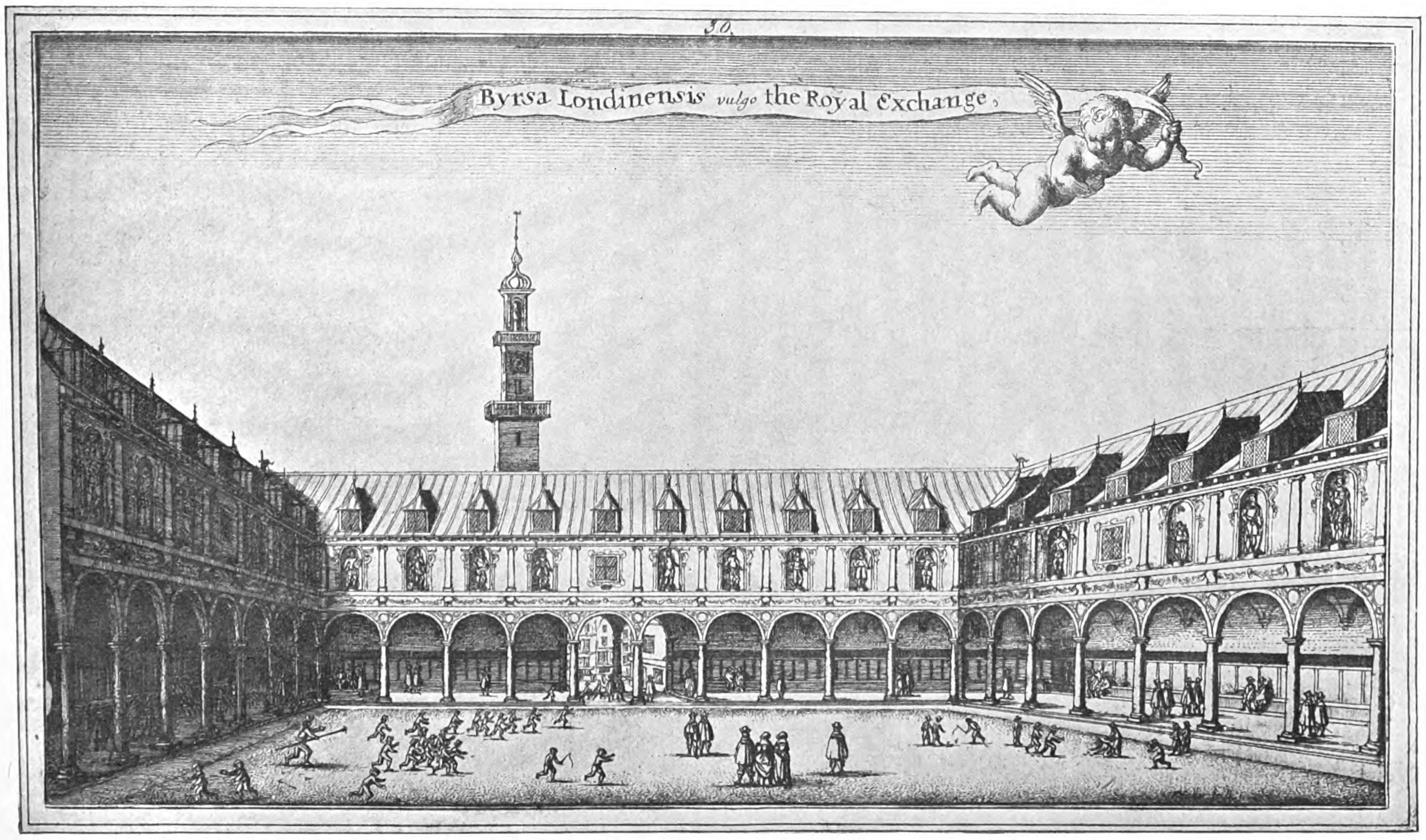
[*] John Norden, "Speculum Britanniæ," 1593.

[†] Holinshed, Harrison, and others, "Chronicles of England," 1589.

[*] The new Exchange at Amsterdam was begun in 1844.


30.
Byrsa Londinensis vulgo the Royal Exchange,

VIEW IN THE COURTYARD OF GRESHAM'S ROYAL EXCHANGE IN THE MIDDLE OF THE SEVENTEENTH CENTURY.

From an Engraving by Wenceslaus Hollar.

London's Exchange—which must not be confused with "Britain's Burse," erected on the site of Exeter 'Change in the Strand and completed by 1608—was opened with much ceremony by Queen Elizabeth on 23 January 1570. So impressed was the Queen that "after that she had viewed every part therof above the ground, especially the Pawne,[*] which was richlie furnished with all sortes of the finest wares in the city; she caused the same Burse, by an Herald and a Trumpet, to be proclaymed the 'Royal Exchange,' and so to be called thenceforth, and not otherwise." That this act of the Queen in recognizing the enterprise of Sir Thomas Gresham, no less than the splendour of the building, the wealth of merchandise, and the assemblage of merchants from different parts of the world, appealed to the imagination of poets and writers is evident from the frequency with which they made reference to it, and the grandiloquent language in which they eulogized it. The following extract from Heywood's remarkable play points to the burst of civic pride which acclaimed the building long after its inauguration :[†]

> 2 *Lord.* We are gazing here on M. Greshams worke.
> *Ramsie.* I think you have not seen a goodlier Frame.
> 2 *Lord.* Not in my life, yet I have been in Venice,
> In the Realto there called S. Markes,
> 'Tis but a bable if compar'd to this.
> The nearest that which most resembles this,
> Is the great Burse in Anwerpe, yet not comparable
> Either in height or widnesse : the faire Sellarage,
> Or goodly Shoppes above. O my Lord Major,
> This Gresham hath much grac't your Cittie London,
> His fame will long out-live him.

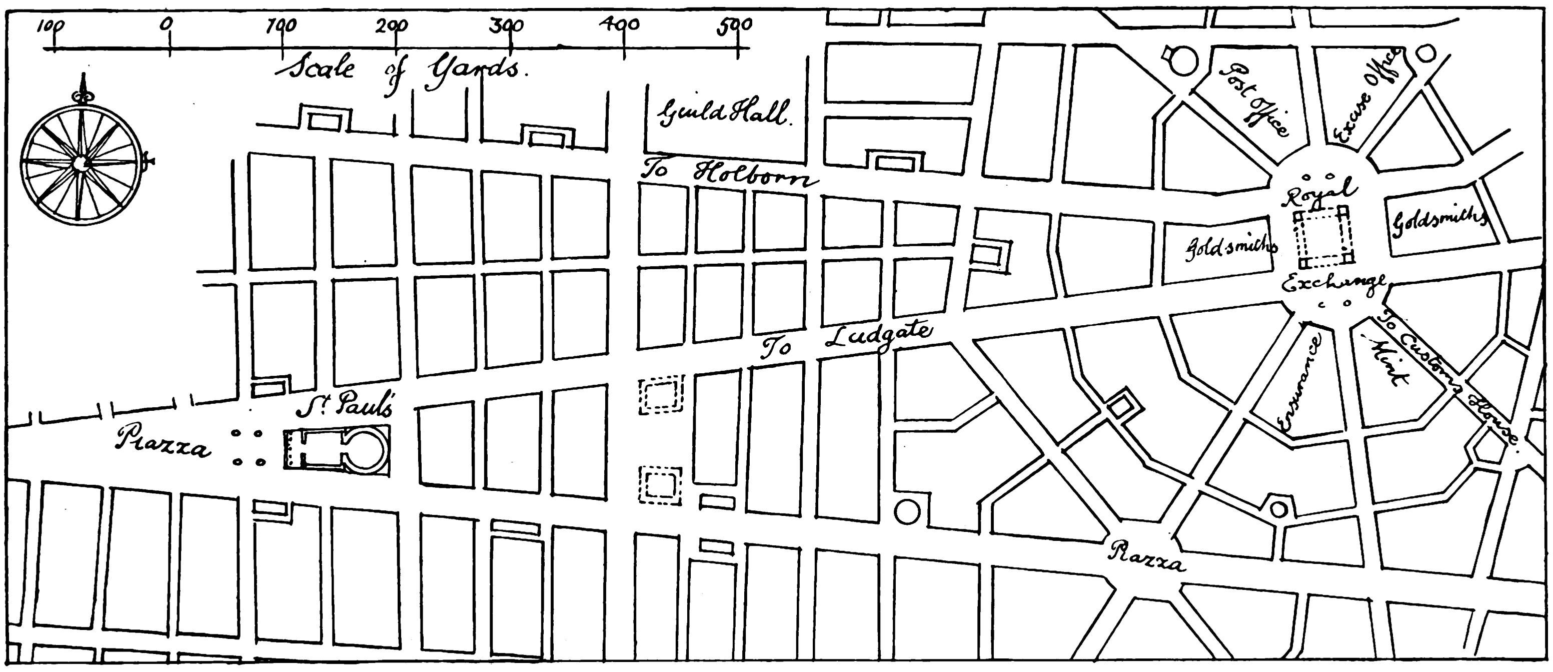
Time has proved that this prophecy was not unwarranted, and there is no more familiar name to this day in the City of London than Gresham's, although long ago it was urged that, whilst he conferred a blessing upon the City, he was not unmindful of the benefits that would inevitably accrue to his estate from the successful completion of a sound business transaction.

Gresham died in 1579, and by will left the Royal Exchange, after the decease of his wife, jointly for ever to the Corporation of London and the Mercers Company upon trust, providing amongst other conditions that the citizens, out of their moiety, should appoint seven lecturers to read lectures on astronomy, geometry, and music, amongst other subjects, at his mansion house in Bishopsgate Street, afterwards known as Gresham College. Amongst the distinguished roll of lecturers occur the names of Sir Christopher Wren and Dr. Robert Hooke, together with others who figure amongst the founders of the Royal Society.

The Exchange in those days was something more than a dull place of business: it vied with the Custom-house for picturesque associations—it was a fashionable meeting-place as well as shopping centre. "Here are usually more Coaches attendant than at Church-doors," wrote Donald Lupton in 1632, and he added: "It is a great House full of goods; though it be almost in the middle of the Citty, yet it stands by the Sea. The merchants should keepe their wives from visiting the upper Roomes too often, least they tire their purses by attyring themselves." In Hollar's view of the courtyard (page 27) the picturesque costumes of the foreign merchants can be seen. Particular positions in the "merchants' area" and beneath the arcades were allotted to the different countries; but there was no need to label these "walks," for the merchants of Amsterdam, Paris, Venice, and other cities were readily distinguishable by their dress. Mingling with the more sedate men of business might be seen—

> . . . . the new-come traveller,
> With his disguisèd coat and ringèd ear,
> Tramping the Bourse's marble twice a day.

Topographers and travellers one after another sang the praises of the Royal Exchange. Even Evelyn thought the Paris Bourse in 1644 "nothing so stately as ours at London, no more than the place where they walk below, being only a low vault"; while a year later he found that of Venice "a place like ours, frequented by merchants, but nothing so magnificent." It is clear, nevertheless, from the various presentments in the Cornhill-Ward Inquest-book that the building cannot have been any too well constructed. In 1580 there is an entry: "The Royal Exchange presented, for that it is dangerous for those wch walk under, pt beinge broken and like to fall



THE ROYAL EXCHANGE ON WREN'S PLAN FOR REBUILDING LONDON.
H. Hulsbergh Sculp. 1724.

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[*] The pawne was the upper covered walk on the south side of the Exchange, which was appropriated to shops. References to the "pawnes above the Exchange" are frequent.

[†] Thomas Heywood. The second part of "If you know not me, you know nobodie. With the building of the Royal Exchange." 1606.

downe," and references to the building being "cracked and dangerouslie decayed" occur in 1598. But the fire of 1666 removed any cause for anxiety that may have persisted on this account by demolishing it beyond all hope of repair. In the words of Pepys, "the Exchange is a sad sight, nothing standing there of all the statues or pillars but Sir Thomas Gresham's picture in the corner." The erection of an entirely new Exchange was inevitable, and during its construction the merchants were temporarily accommodated at Gresham College. Wren, in his plan for rebuilding the City, accepted the original site; but whereas Gresham's building had been hemmed in on two sides by the adjoining houses and on the other two sides by narrow streets, he realized that a building of such civic importance should occupy a commanding position. He made it the focal point in the lay-out of his principal streets, one from St. Paul's and Ludgate leading to the south front, and another from Holborn over the Fleet Canal to Newgate and thence straight to the north front, while on the south side a wide street is shown leading direct to London Bridge with diagonal streets to the Custom-house and Dowgate (see plan on opposite page).

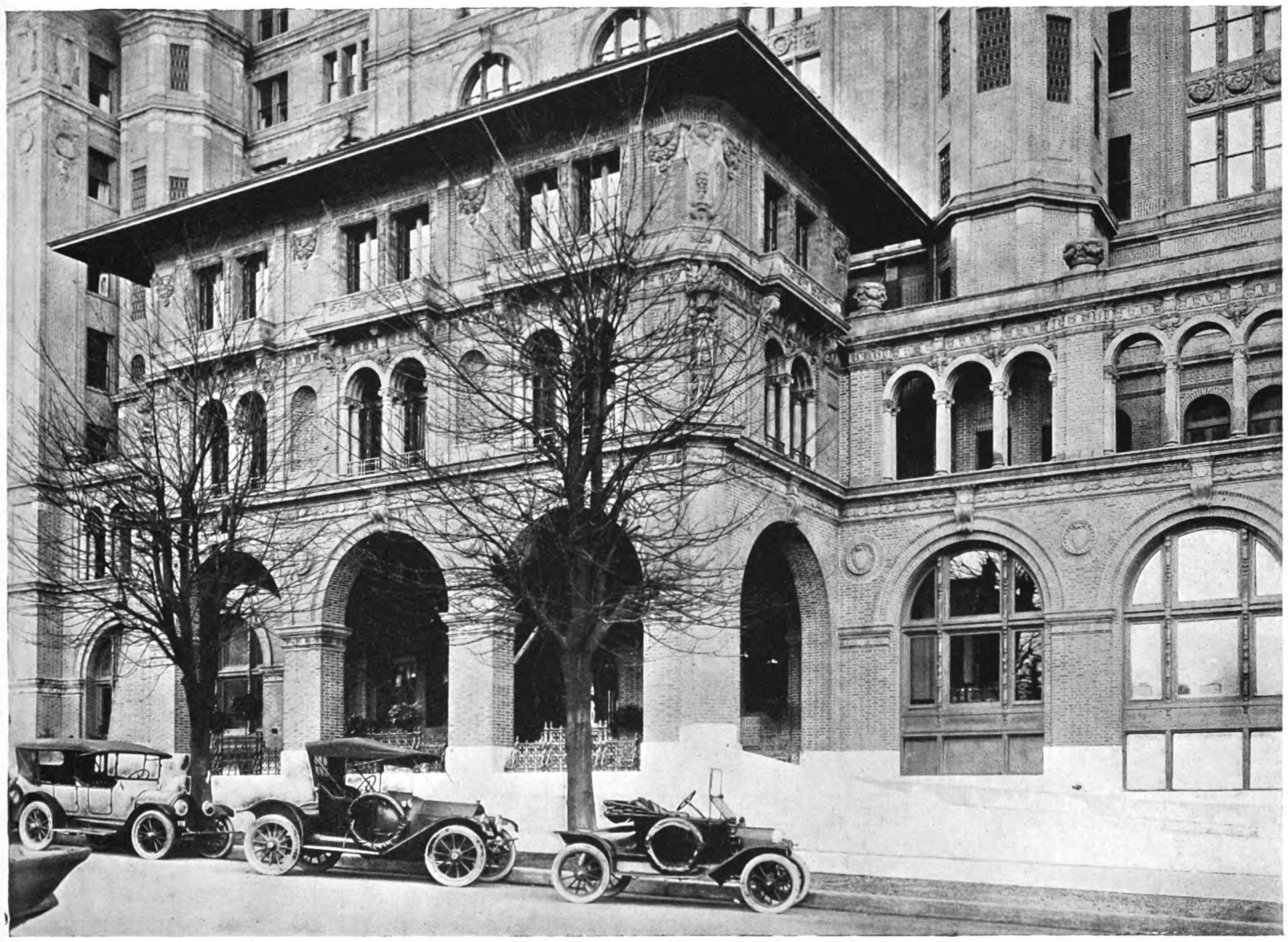
From the "Parentalia" it is evident that he intended the Exchange "to stand free in the Middle of a Piazza, and be, as it were, the Nave or Center of the Town, from whence the 60 Feet Streets as so many Rays, should proceed to all principal Parts of the City: the Building to be contriv'd after the Forum of the Roman Forum, with double Porticos."

(To be concluded.)

THE NEW C.P.R. HOTEL, VANCOUVER.

THE Hotel Vancouver is a building which forms a link in the chain of about twenty large hotels, extending between the Atlantic and Pacific Oceans, owned and operated by the Canadian Pacific Railway Company.

The Canadian Pacific is a nation-building corporation, with a scope of operations much broader than that of a usual railway company. Second only to the Canadian Government in its land holdings in Canada, owning also great fleets of steamships on both the Atlantic and Pacific Oceans, and in the coastal transport, it provides the most rapid, comfortable, and luxurious travel between Europe and Asia, via the "Trans-Atlantic, Trans-Canada, and Trans-Pacific Route." It not only provides transportation and operates hotels, but does work of colonization, land settlement, and development on an unparalleled scale. It possesses the greatest irrigation system in the world. The C.P.R. irrigated lands in the dry belt of Alberta alone are greater in area than all the irrigated tracts in the United States taken together. It has developed districts as large as some of the American States, whole cities and such budding towns as Bassano. It sells lands for farming purposes that require no



VIEW OF CARRIAGE PORCH, GEORGIA STREET.

fertilizer, at prices that are less than the annual cost of nitrates per unit area on neighbouring lands on the American side of the boundary line—which helps to explain how it happens that, before America's entry into the war, five thousand Americans were with the "Canadian" troops for overseas service.

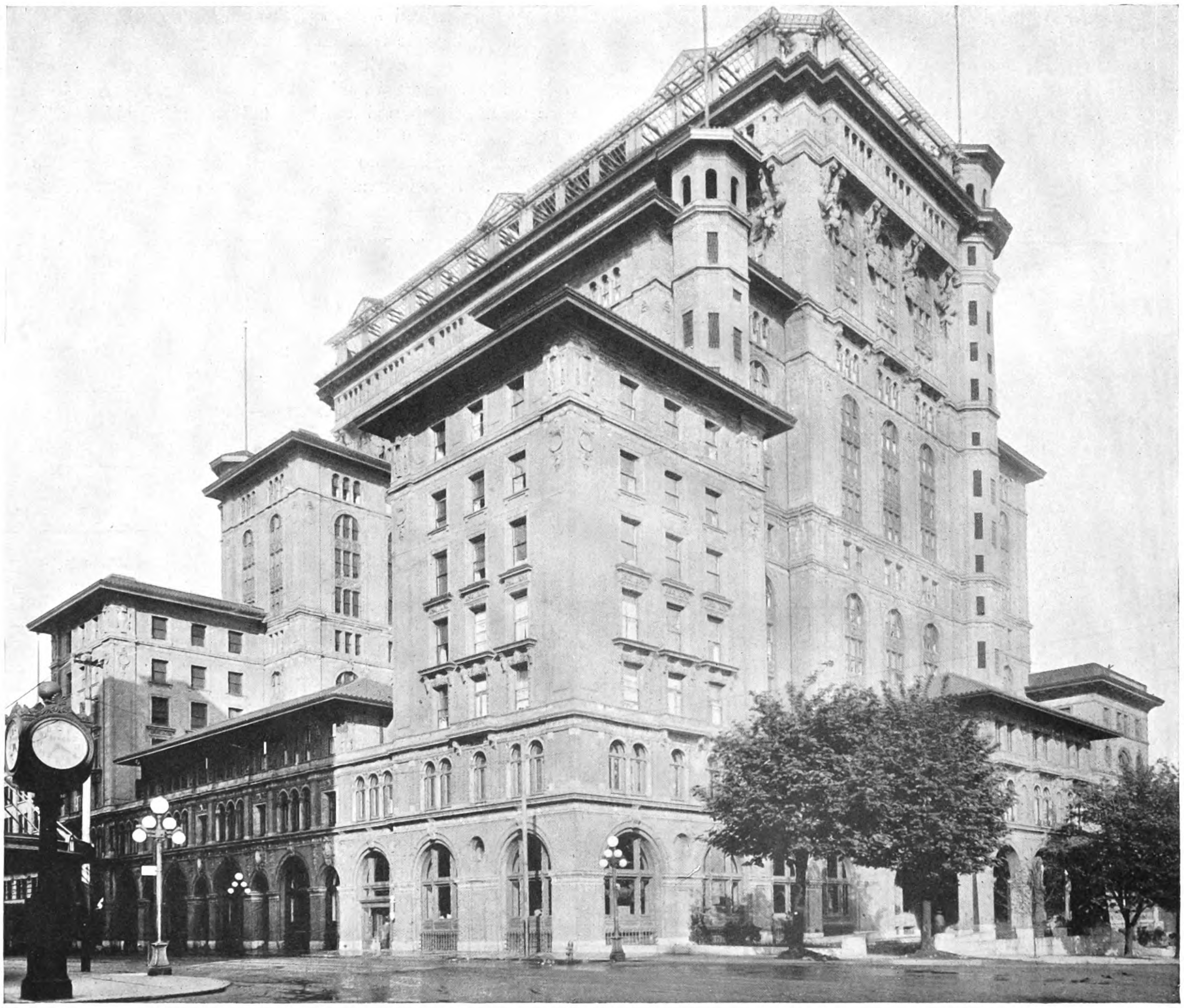
Vancouver is the terminal city of the railway and the principal port on the Pacific of the C.P.R., and therefore is a point at which travellers to and from the Orient and Australasia transfer between train and ship. It is the metropolis of the Province of British Columbia, the market city of the great fruit-raising areas in its valleys, and the centre of the richest mining and timber lands in the world. Copper, iron, gold, silver, zinc, and other metals, also coal, are mined extensively in this vicinity. Large oil centres, enormous pulp and paper works; cedar, Douglas fir and maple lumbering; ship-building; canning, and catching the great drives of salmon in the inlets, bays, and rivers around the two peninsulas on which the city is built, are the large staple industries on which the permanence of the city is founded. Six other railway companies are now building lines into Vancouver, and two are erecting large terminal stations; but it was the C.P.R. that built the city.

The country around and about Vancouver is "the paradise of the man with rod or gun." Moose, caribou, wapiti, bear, mountain sheep and goats are found in abundance; timber wolves and mountain lions are shot from time to time, and small game, fur-bearing animals and birds, in great variety, are here in apparently inexhaustible quantity.

The climate along the coast compares favourably with that of the Mediterranean coast of France in winter, or the Italian lakes in summer.

To the sightseer, the landscape offers wonderful charm. The peninsulas forming Vancouver rise in gentle slopes to a couple of hundred feet above sea level. Beyond Burrard Inlet to the north and the Fraser River to the south, rises a horseshoe-form range of high mountains on a radius of perhaps twenty miles. Those to the north are but four or five miles distant, while Mount Baker, visible from the high places, rises more than twelve thousand feet, like a vast pile of snow in the sunlight, nearly forty miles to the south—a wonderful spectacle.

Of the city proper, its well-paved and well-lighted streets place it in a class by itself in Canada. The populace, though



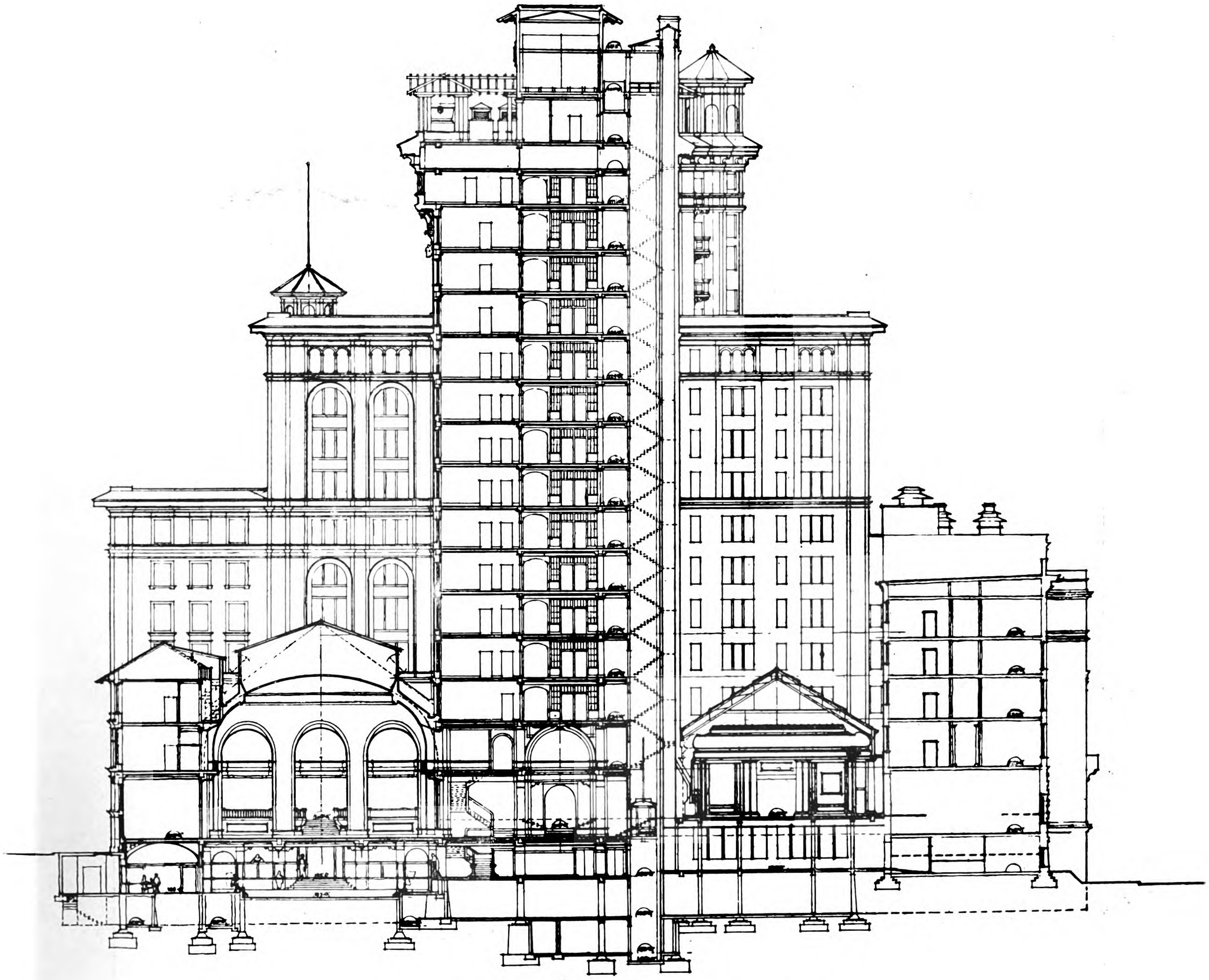
THE NEW C.P.R. HOTEL, VANCOUVER.
Francis S. Swales, Architect.

fairly cosmopolitan, is well mixed with picturesque types, pioneer in instinct and development.

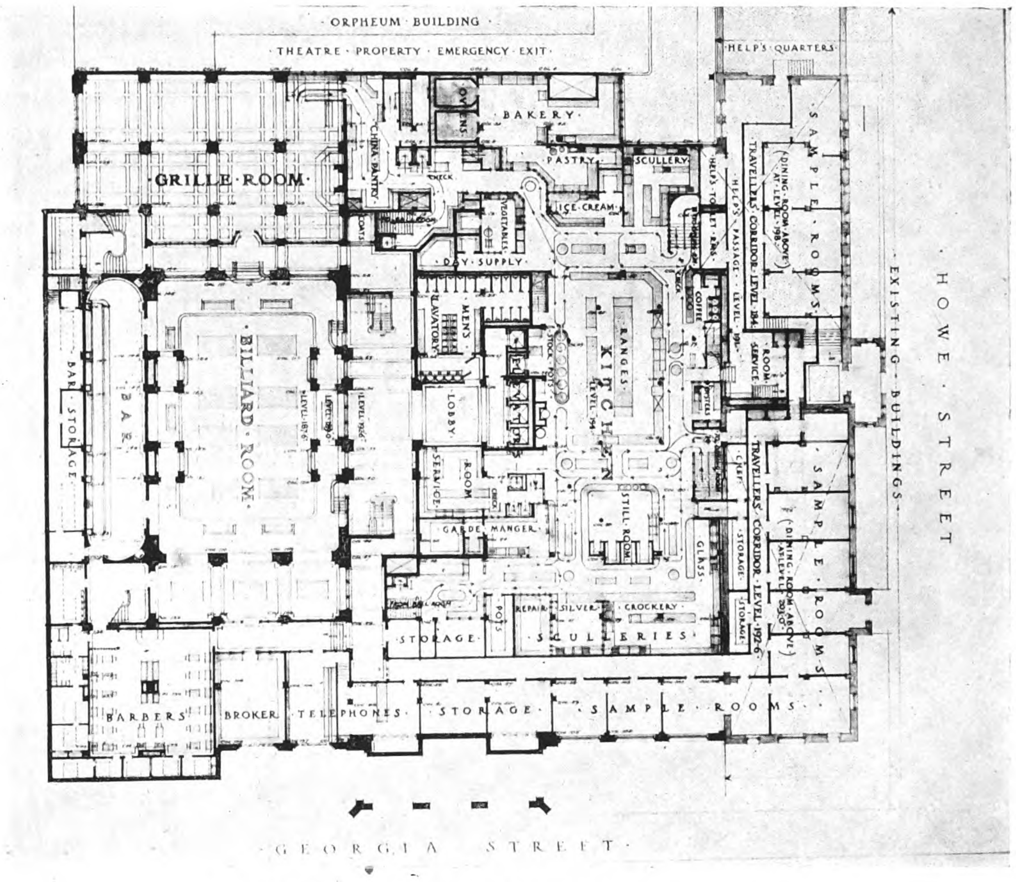
Architecture, painting, sculpture, music, are regarded curiously rather than with any sincere interest; the arts, far as they have progressed, cannot be said to flourish here more than in any other part of Canada. Europeans, Americans from the Eastern States, and "globe-trotters" inquire about such things, and they, therefore, are "commercial assets."

Thirty years ago the "city" was wiped out by a fire which doubtless did more good than harm by causing some thought to be turned to fire risks when rebuilding, where wooden structures are the rule. About that time the Canadian Pacific Railway built the first hotel at the corner of Granville and Georgia Streets; a few years later an extension was built on the adjoining property on Granville Street. About ten years ago a "new" five-story building was erected on the other property adjoining the original building at the corner of Georgia and Howe Streets, and a plan for the ultimate extension of the design around the whole perimeter of the lot was made. The buildings erected were of brick walls, but the interior construction was of wood. The scheme of extensions was abandoned. Six years ago the official architect for the Canadian Pacific Railway designed an extension along Howe Street to the building at the corner. It followed the same general architectural treatment, but was built of fire-resisting reinforced concrete construction. It was built one story higher than the older building, and the top story is of bright green glazed terra-cotta. The lower stories of both buildings are of yellowish-brown brick, with "chocolate" terra-cotta "trimmings." These two buildings were required to remain and be incorporated with the new buildings in a programme of operations which began in the early part of 1911 and ended in July 1916.

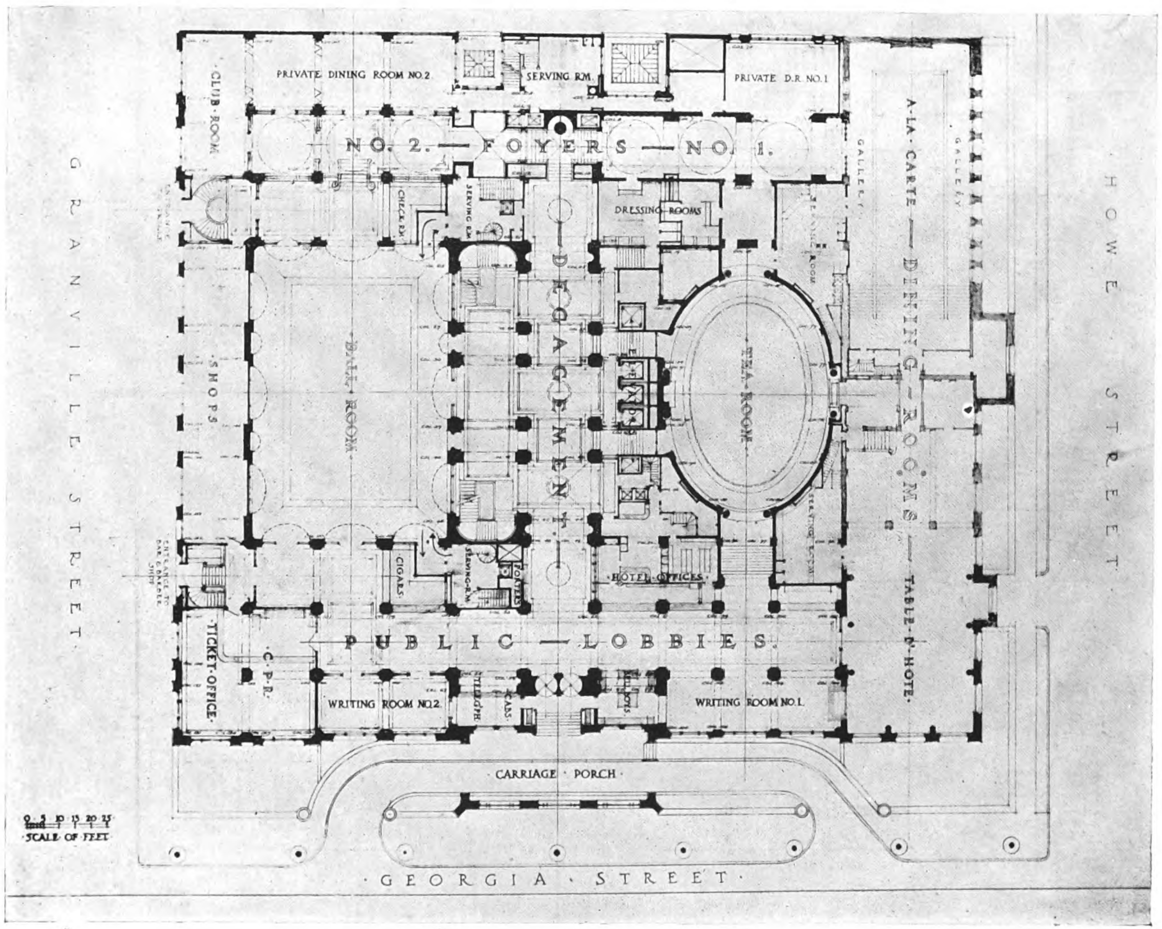
The site is on sloping land at the top of a low hill, which forms the highest ground in the business section of the city. The available portions of the site measure 224 ft. on Granville Street and 216 ft. on Georgia Street. The floor levels of the two buildings that were to remain; the construction of the wing which had just been completed; the necessity of keeping all the old buildings in operation during the new construction; the existence of the old power house and kitchens in the court behind the Howe Street wings; the only



CROSS SECTION THROUGH CENTRE OF BUILDING.

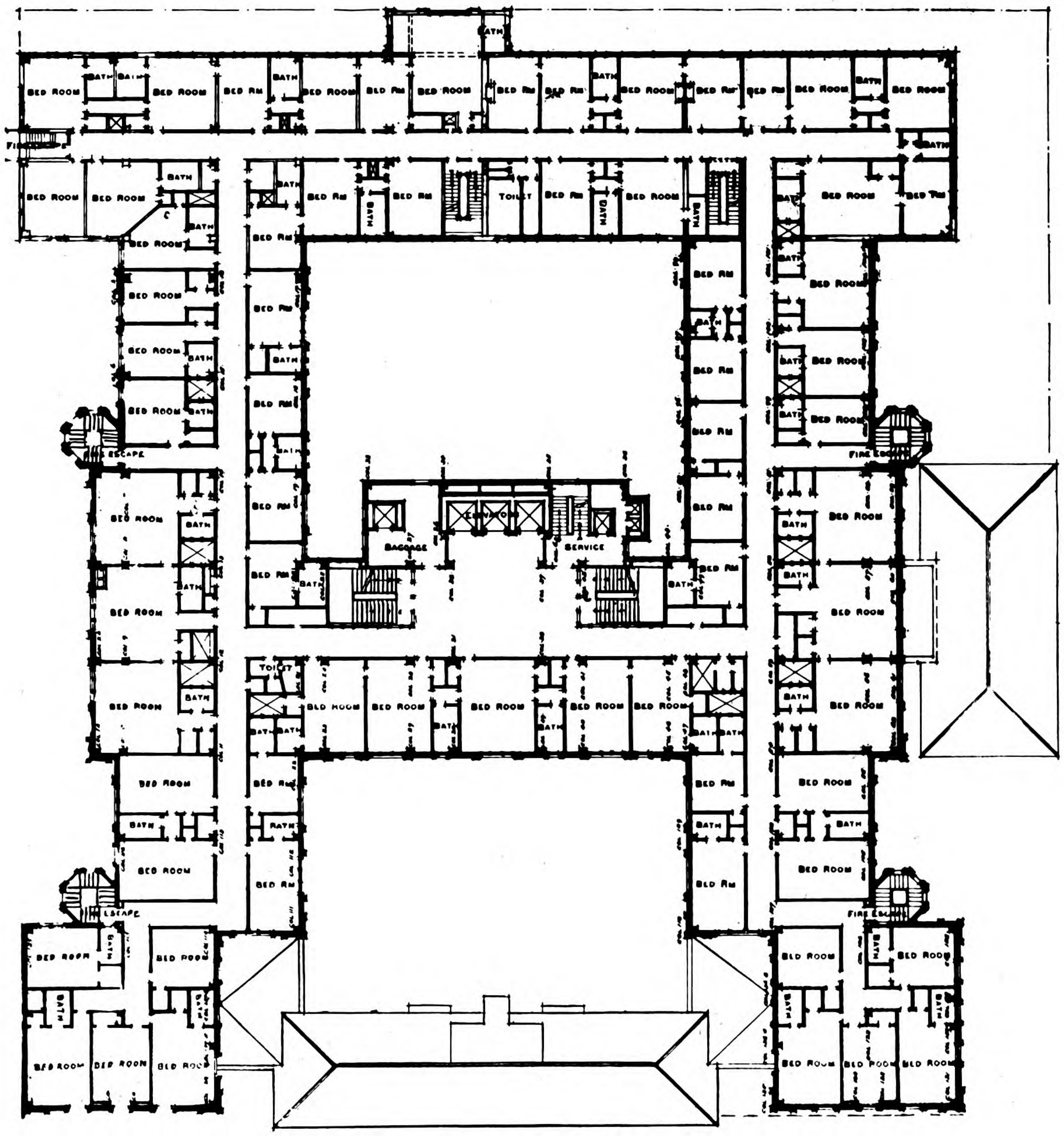


PLAN OF LOWER GROUND FLOOR.



PLAN OF MAIN GROUND FLOOR.

available access for delivery carts to basements at the southern side; the adjoining theatre and apartment houses, whose light and power supply is acquired from the hotel plant; a few fixed and many constantly changing ideas on the part of the head of the Company's hotel system; and the existence of a building by-law in process of revision—were the principal general conditions to which the planning was required to conform. The building laws allow 120 ft. of height for the main area of any site, subject to conditions of light areas and number of stairs and fire escapes. On sites of 15,000 square feet or more one-third of the area may be extended to the height of 200 ft. It was ascertained that the walls and foundations of the existing building at the corner of Howe Street could be carried two stories higher, which was taken into account as a possible contingency. The two pavilions facing Granville Street were therefore designed to reach the same height, and the face of the corner pavilion was kept to the same plane on Georgia Street as that on the existing building. With the object of securing additional light and air, also the maximum number of outside rooms with the least possible disturbance from all disagreeable street noises, the main body of the new building, above the ground story, was designed on an **H** plan, set back from the building face of substructure, 20 ft. on the Georgia Street front and about fifty feet on the Granville front. The cross wing of the **H** was carried to the height limit prescribed by the by-laws. The fire escapes were arranged, to avoid the usual unsightly iron devices, within towers so placed as to do the least damage to light to guestrooms and leave the maximum floor space available for room purposes. This plan was convenient for building operations, as the central block could be erected, leaving the old buildings intact until the main new portion was ready for guests.



PLAN OF TYPICAL BEDROOM FLOORS.

The existence of a three-story arched window motif with a one-story frieze above in the Howe Street wings suggested its adoption for the body of the new buildings. It does away with the honeycomb monotony that would otherwise result with a building of such large masses, and it provides a means of supplying nearly all the bedrooms with a triple window. The frieze story repeated between the three-story motif accentuates the scale and provides a vehicle to carry horizontal lines around the building at convenient levels for the general architectural effect. The arcade at the second story was introduced to increase the depth of, and give continuity to, the base, which constitutes a kind of socket from which the main masses of the building rise. The corner pilasters of the highest portion of buildings cover the panels of wind-bracing in the structural steel frame, and are repeated on the lower wings to unify the effect of vertical ties. The projecting top story cantilevered over the tops of columns reduces bending stresses in the columns and permits a lighter treatment of the cornice proper than would otherwise be required, which also assisted in reaching a balance of scale as between the different masses of the whole structure. The above reasoning determined the general plan and exterior composition.

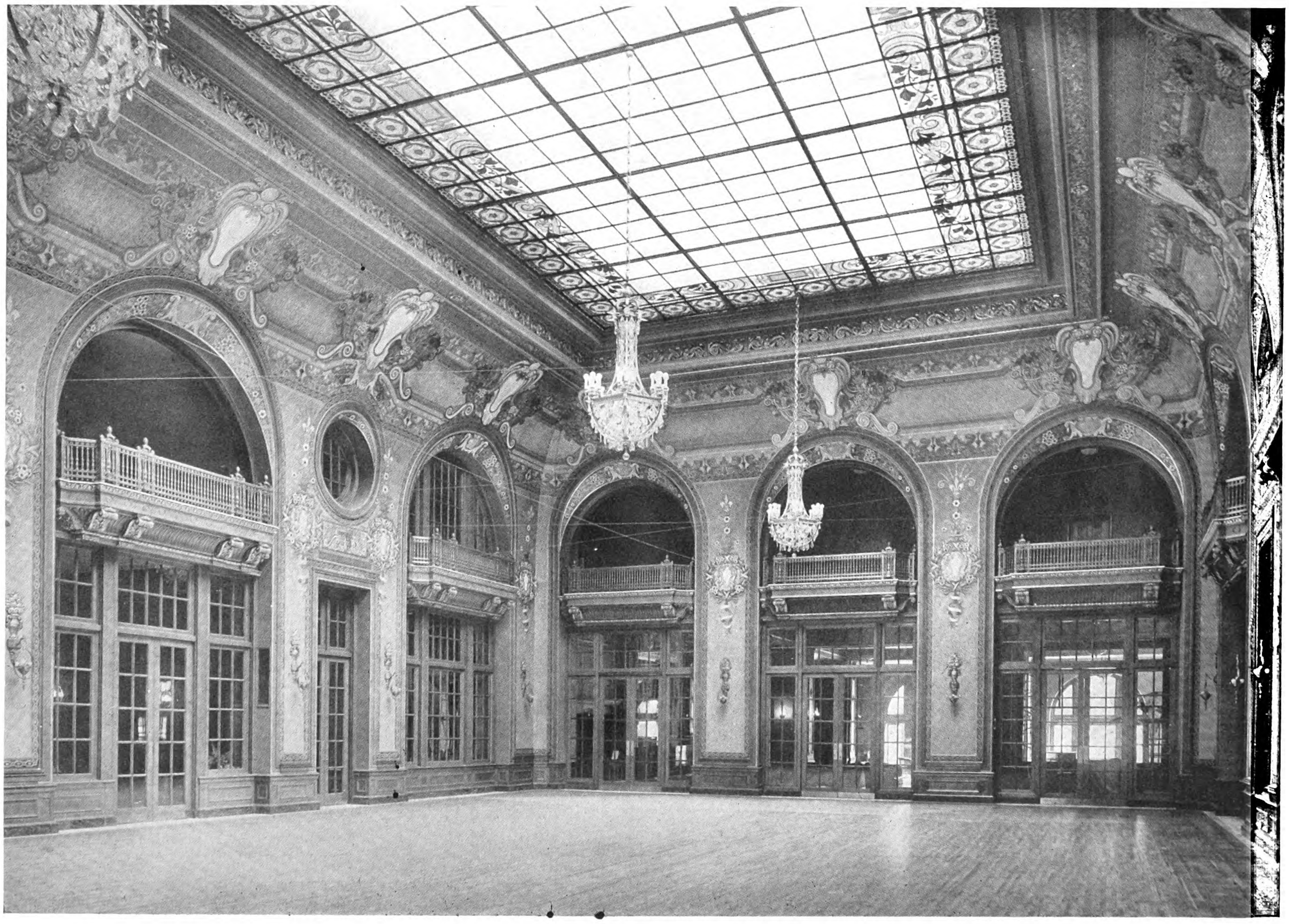
The location and levels of existing dining-rooms in the Howe Street wing determined those of the new kitchen, private dining-rooms, and grillroom, and of the tearoom in the western court. All that portion of the building east of the *dégagement*, containing the ballroom, with billiard-room below, grill, bar, etc., followed as an extension to the main high structure, which was required to be built and practically completed before the extension could be begun.

The grillroom is approximately level with the kitchen, and the kitchen is 4 ft. below the level of the main existing dining-room. The table d'hôte dining-room is 9 ft. above the kitchen, as is also the ballroom or banquet-hall. Wide stairs, partitioned on the centre to prevent collisions between waiters moving in opposite directions, with easy rise, form the main service routes to the principal public rooms. The galleries, tearoom, and private dining-rooms are provided with serving-rooms with dumb-waiters, equipped with hot plate, bain-marie, and refrigerator; also all pantry equipment, telephones, telautograph, and other modern conveniences.

The whole of the kitchen departments are on one level. The stores are in the sub-basement adjacent to the delivery court and receiving-room. Helps' dining and rest rooms are in an adjoining building. Maids' dormitories, housekeeper's suite, accountants' offices, valet, linen distributing room, etc., are in the first or mezzanine story, overlooking the courts.

The lower ground floor is arranged as a social centre, particularly to supply entertaining facilities to commercial travellers. The grillroom, bar, billiard-room, barber's shop, lounging lobby, lavatories, and sample-rooms are arranged *en suite*. Two entrances from Granville Street and an entrance for sample trunks from Howe Street are provided.

The grillroom is the popular lunch and supper room used by local people and for informal dinners by guests. The "grill" was, however, at the instance of the management, removed to the kitchen, and a fireplace and mantel substituted. The floors are of light brown and grey Rublino—a mixture of rubber and linoleum mosaic tiling. The base, hearth, and facings are of brown local quarry tiles. The walls are panelled with rotary-cut British Columbia Douglas fir, stained brown, with stiles, rails, and mouldings of British Columbia maple, stained black and rubbed. The canvassed frieze and ceiling of plaster panels are painted with decorations based on Indian blanket designs, the colours being founded on two particularly fine Hopi and Bayeta blankets. The lighting is intended to be indirect, with reflectors concealed within baskets made by local Indians.



THE BALLROOM.

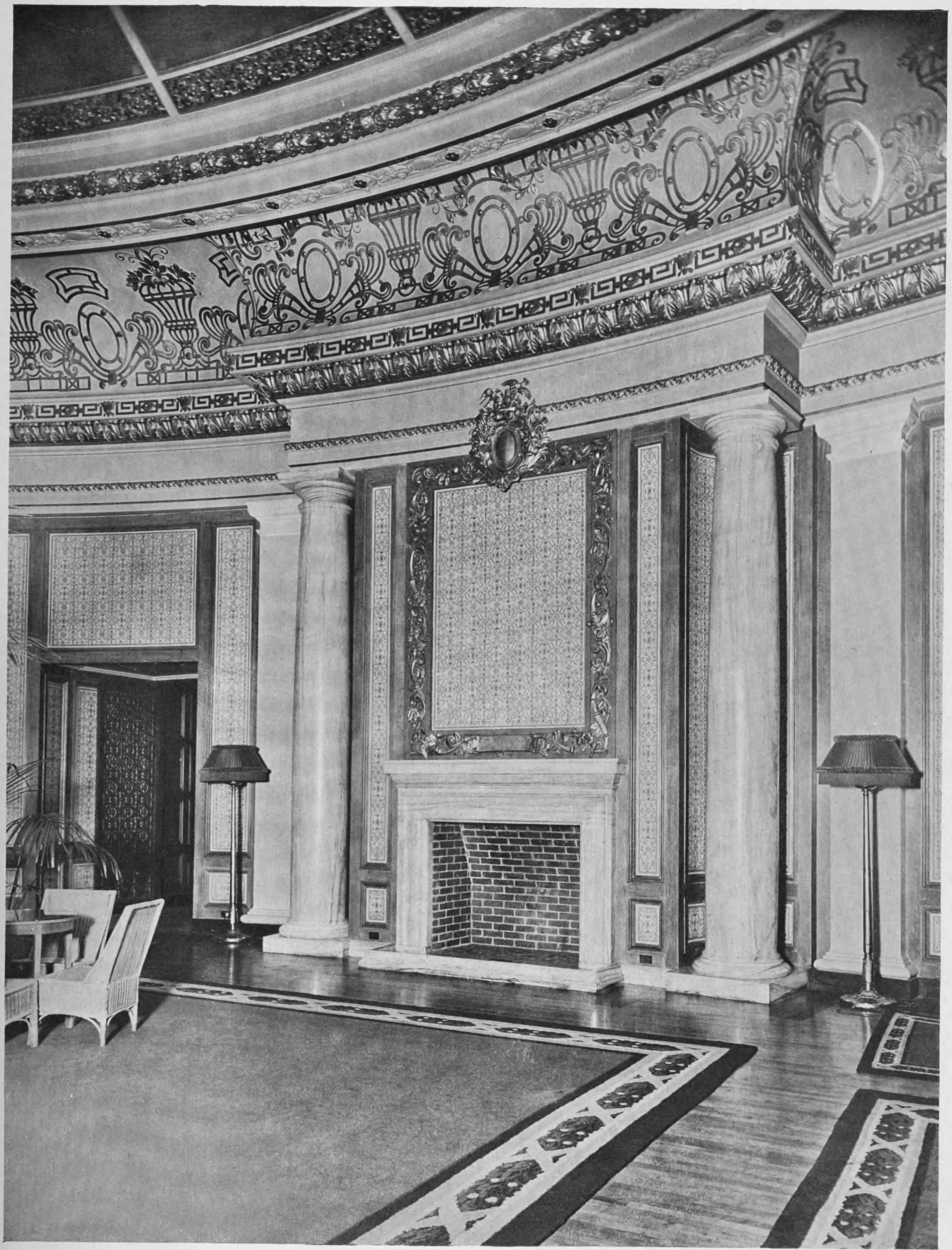
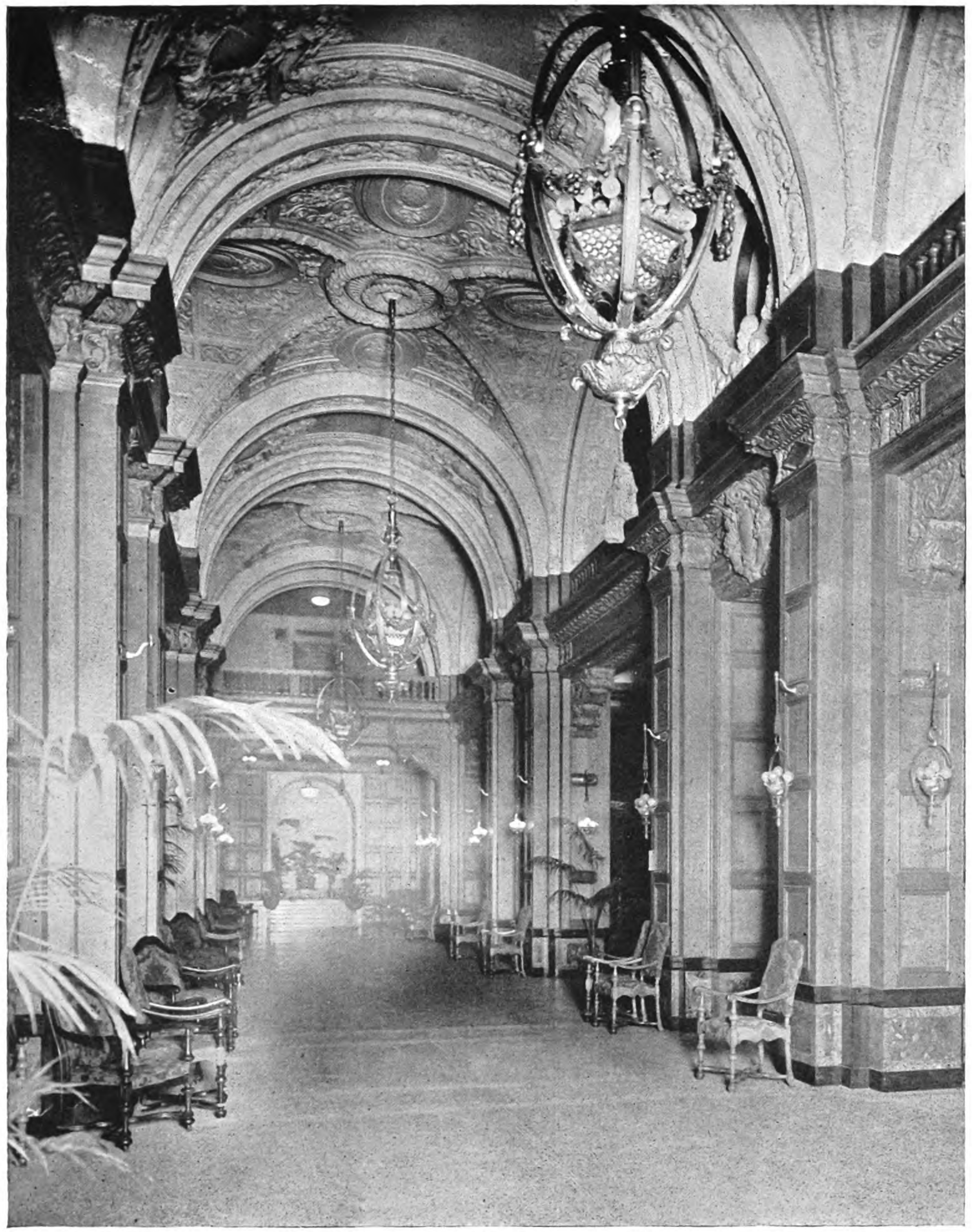


Plate IV.

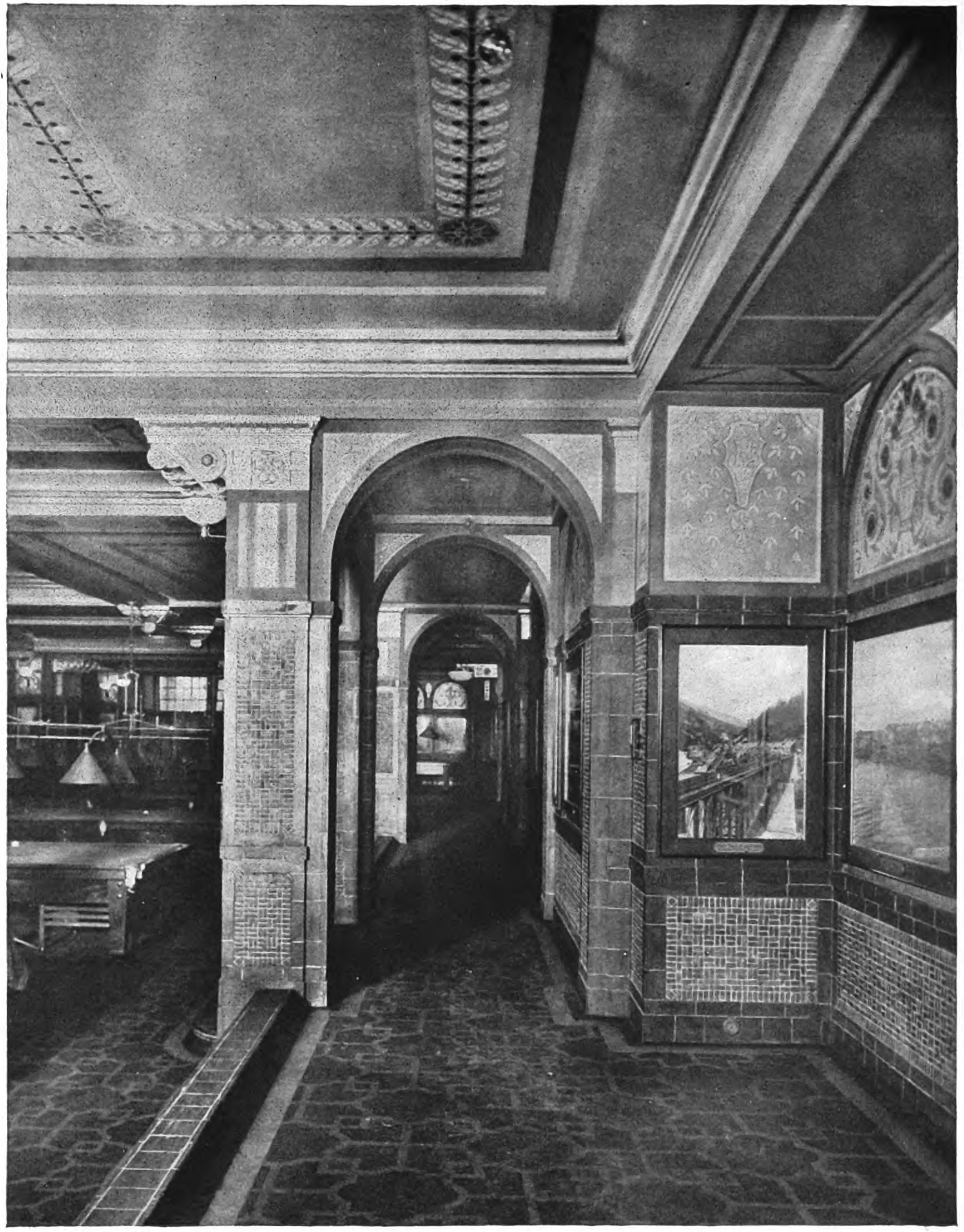
August 1917.

THE NEW C.P.R. HOTEL, VANCOUVER: DETAIL OF LADIES' TEAROOM.

Francis S. Swales, Architect.



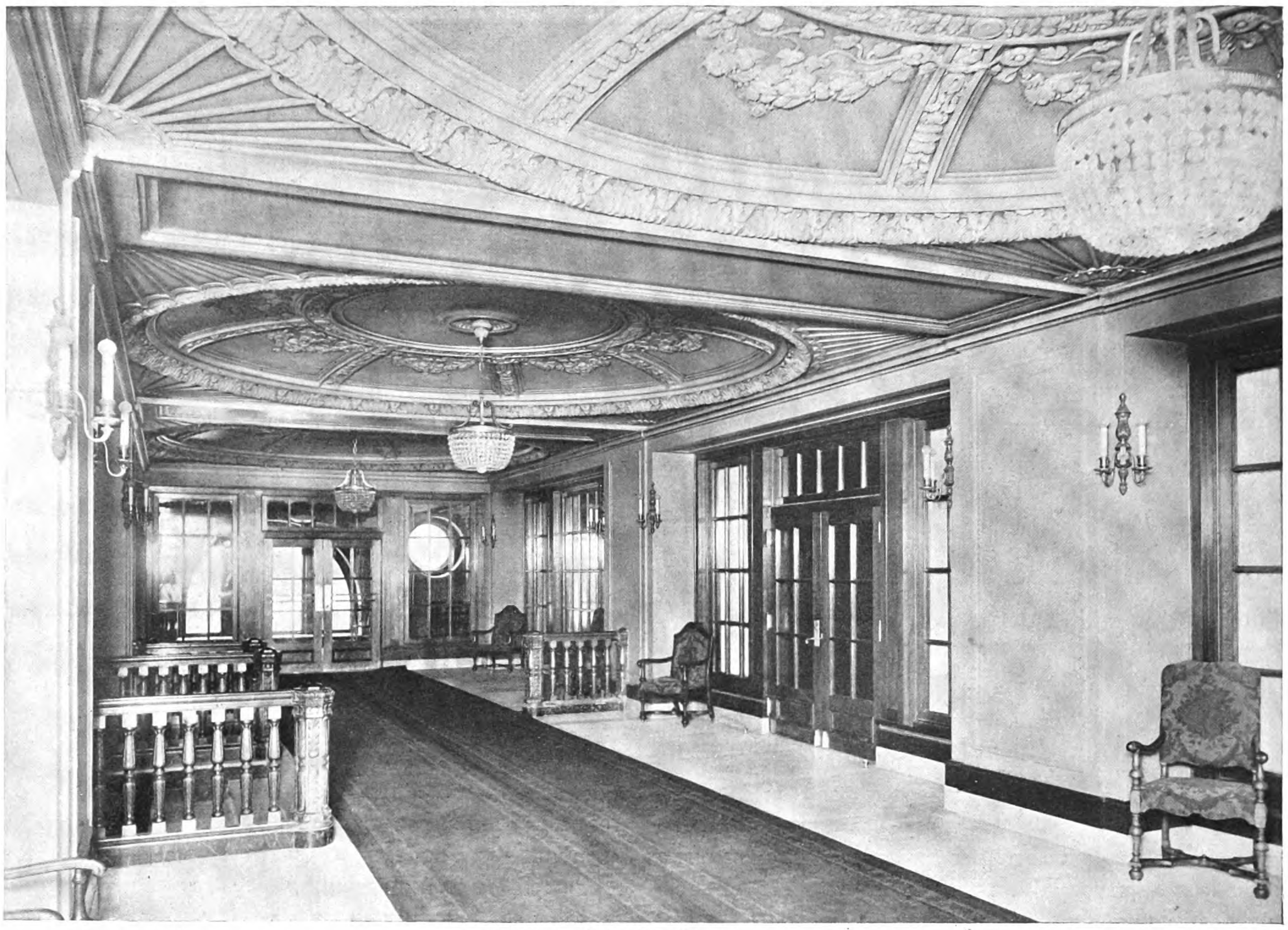
Main Entrance Corridor (Dégagement).



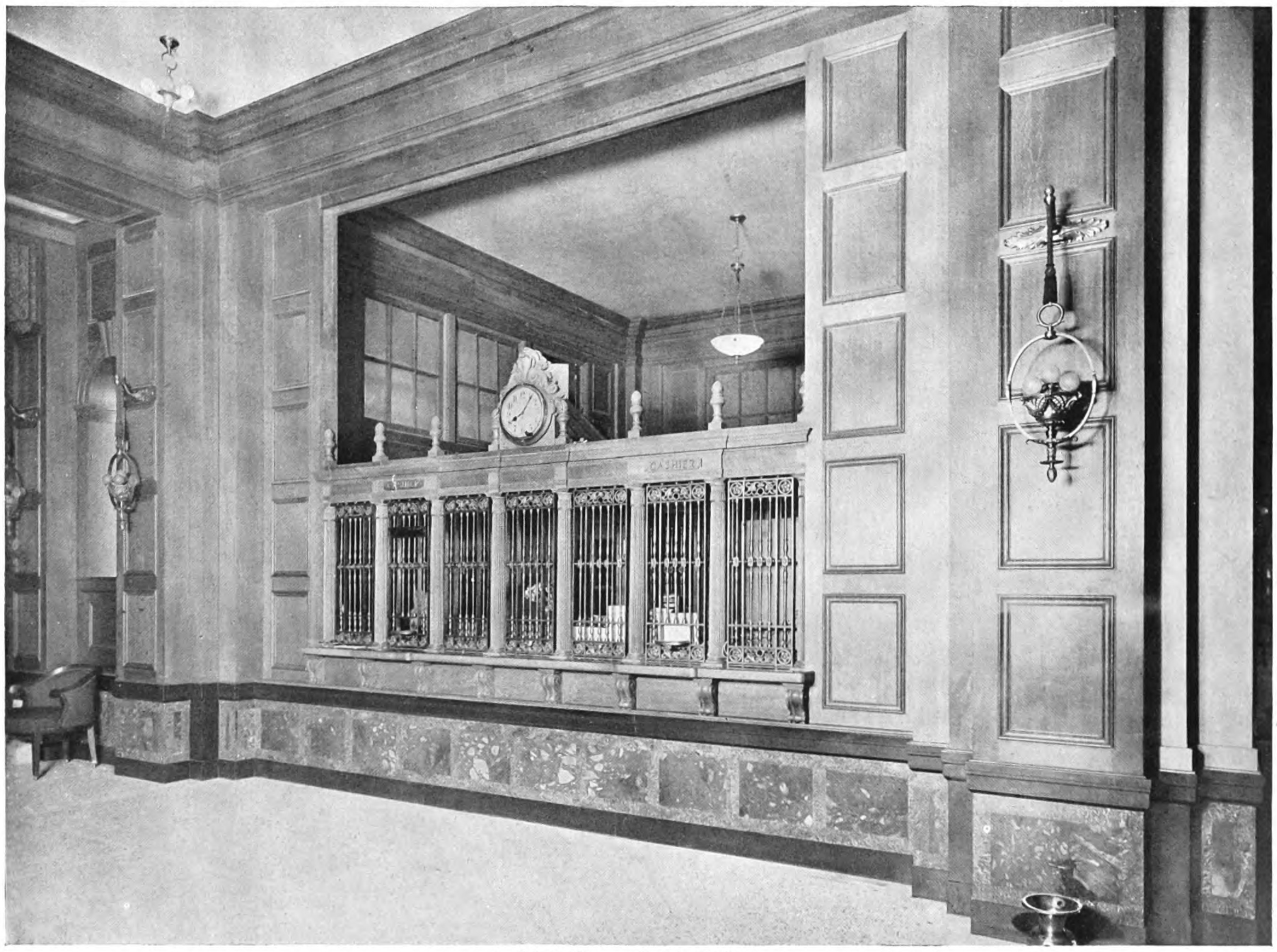
Detail of Passage around Billiard-room.

THE NEW C.P.R. HOTEL, VANCOUVER.

Francis S. Swales, Architect.



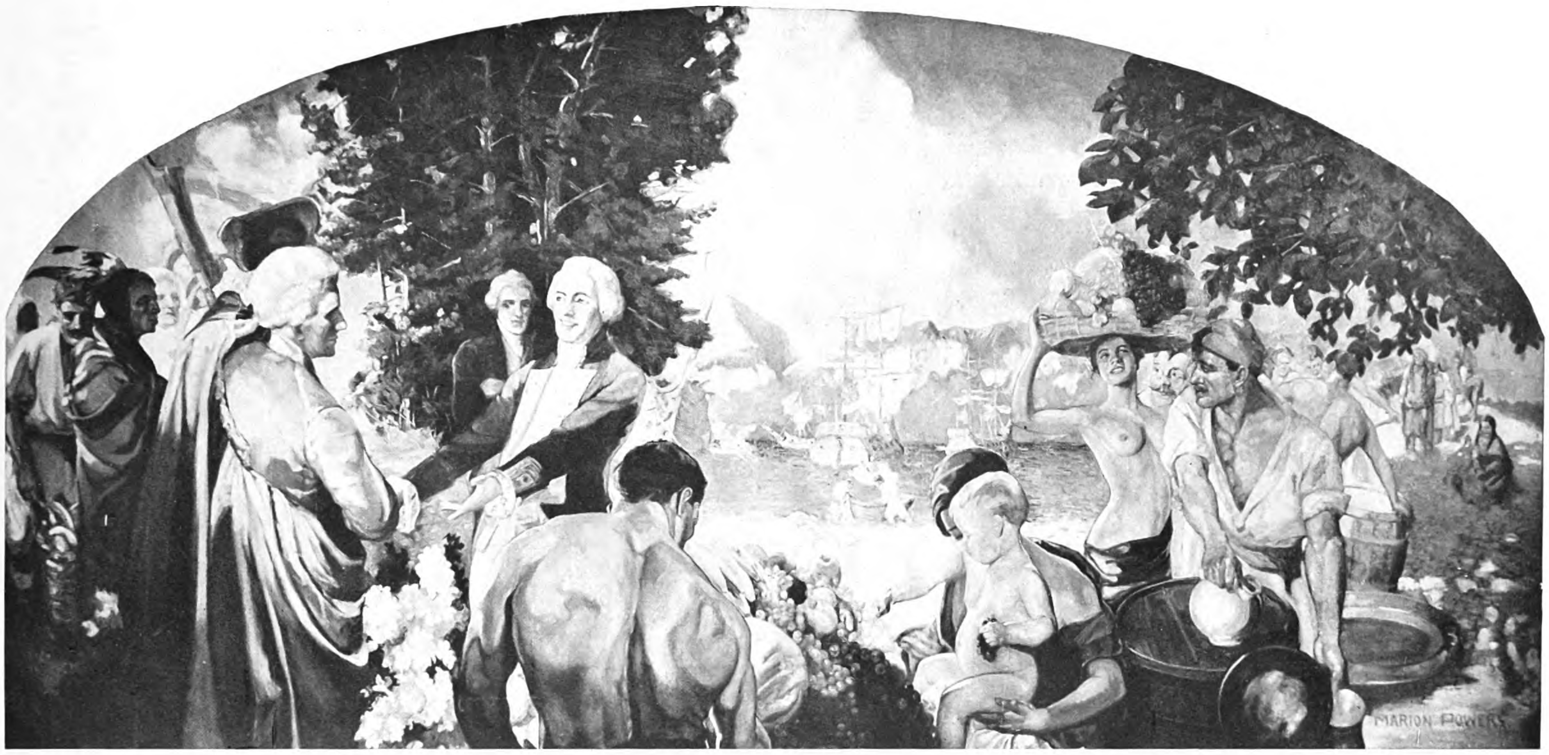
Foyer No. 2.



Cashier's Screen in Hotel Offices.

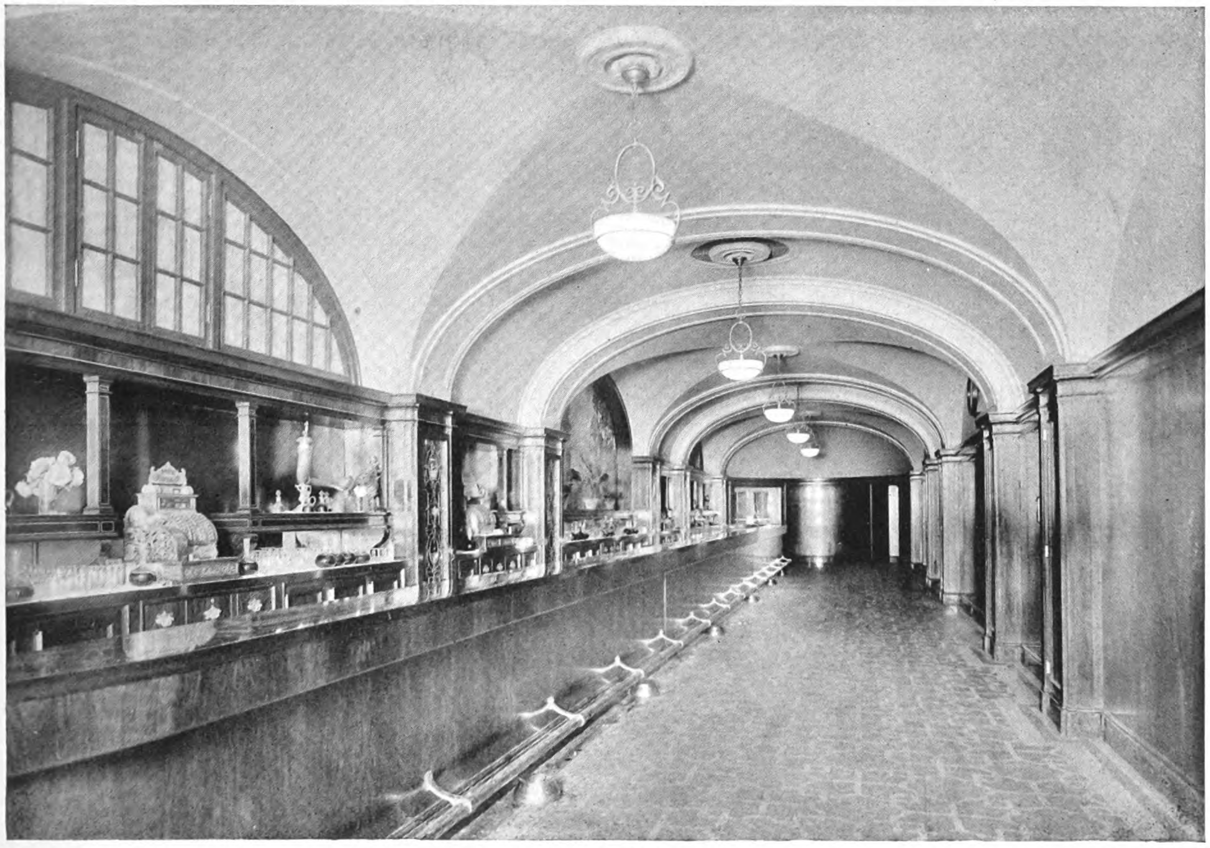
THE NEW C.P.R. HOTEL, VANCOUVER.

Francis S. Swales, Architect.

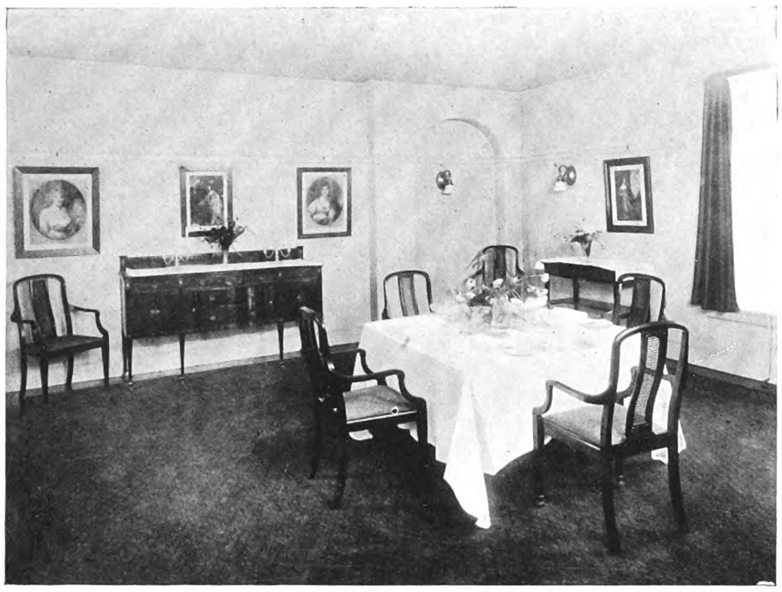


DECORATIVE PAINTING AT BACK OF BAR: "MEETING OF VANCOUVER AND QUADRA AT NOOTKA, B.C."
BY MARION POWERS KIRKPATRICK.

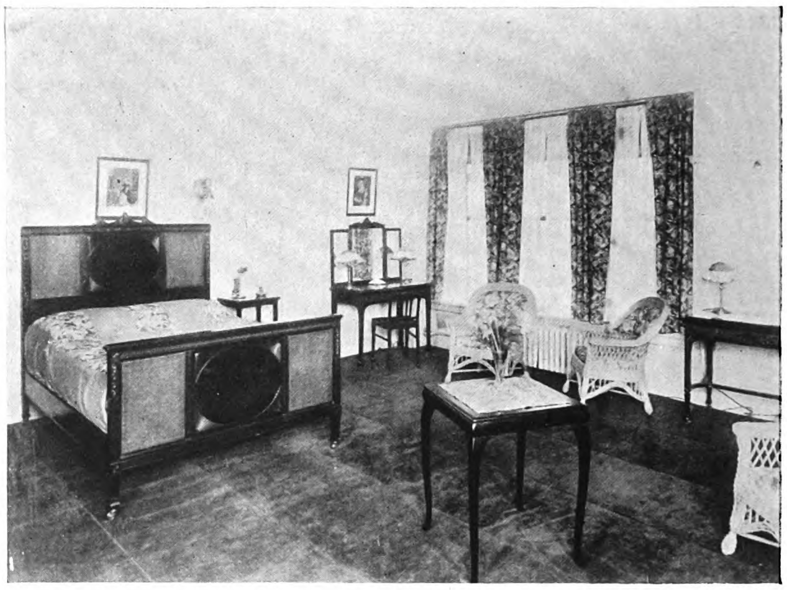
The floor of the playing space of the billiard-room is 5 ft. 6 in. below the level of the grillroom, passage, and lounging lobby; surrounding the playing space, raised 18 in. above it, is a platform wide enough for settees and chairs and a passage behind them, provided for onlookers. Curtain walls, 7 ft. high from the lower level, with open arches above same, afford elbow rest at the higher level, and a full view of the tables over the heads of onlookers seated or standing on the platform from the passage and lounging lobby. These curtain walls are flush panelled in tiling of which the panels are made of common kiln-run two-by-four red "garden-walk" tiles, $\frac{1}{4}$ in. thick; the base, stiles, rails, and mouldings are of bull-nosed brown quarries, 1 in. thick. In place of tile-panels, the upper part of the dado is filled, between the tile-rails and stiles, with Van Dyke brown enlargements of photographs of the very beautiful scenery along the route of the Canadian Pacific Railway, the publicity branch of which supplied its splendid collection of photos, from which the architect was enabled to select a series of good decorative panels. They have been arranged so that by commencing at one corner and following the perimeter of the room one "travels" eastward or westward to the most interesting points along the route between the Pacific Coast and Gulf of St. Lawrence. The frames of the pictures are of Circassian walnut, 4 in. wide, with a $\frac{1}{2}$-in. gold slip between picture and frame and an outer moulding $1\frac{1}{2}$ in. wide of ebony. The ceilings are of plaster, panelled, and painted with decorations in the primary colours. The floor is old gold and blue Rublino tiling, with kerbs and steps of quarry tile. Two pairs of doors lead from the platform of the billiard-room, and two other entrances, at the ends, from the street lead to the bar-room. This room is 120 ft. long by 20 ft. wide. The ends are semicircular on plan. The ceiling is of semi-elliptical



THE BAR.



TYPICAL PRIVATE DINING-ROOM.



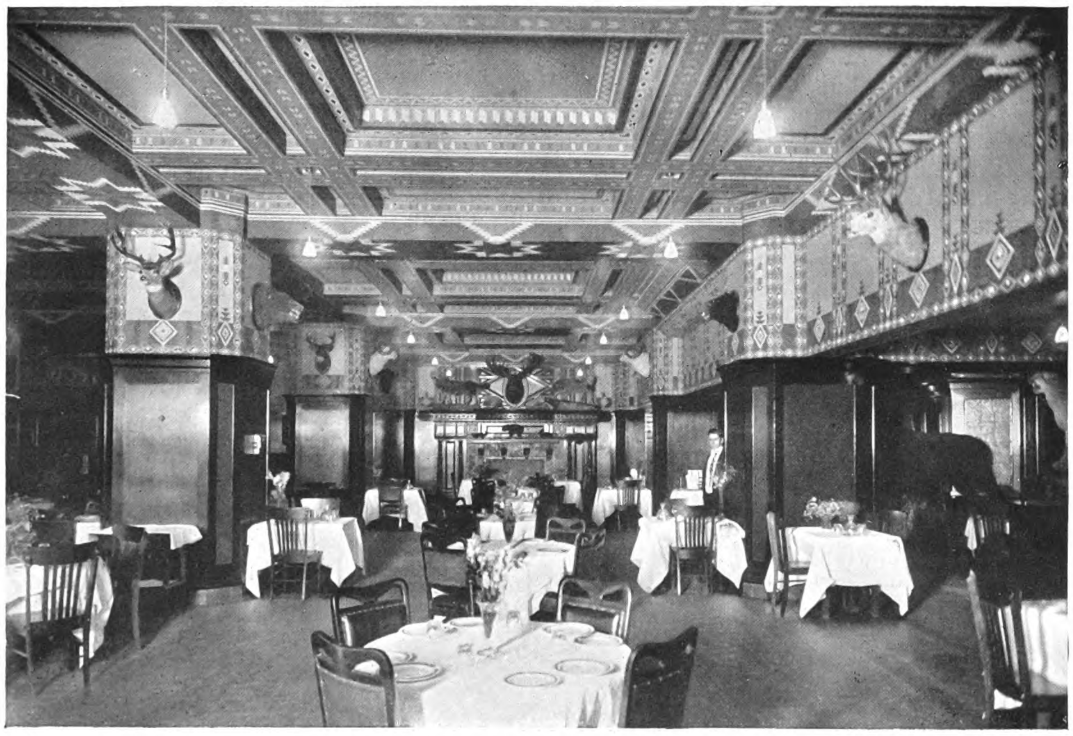
TYPICAL BEDROOM.

cross-vaulting in plaster, with half-domes formed at the ends. The room is finished to a height of 8 ft. in Circassian walnut flush match-grained veneers. The matching is made on a line on the horizontal centre of the panels of the recesses of the back bar, about 5 ft. 6 in. from the floor, which is carried all around the room. A log with an exceptionally beautiful burl was found, from which all the face veneer was cut, and this matched right and left in double widths of about eighteen inches, and top and bottom along the horizontal line, forms a rose pattern which is a sufficient decoration, and which, it was felt, no carving, panelling, or other ornamentation could improve. The bar itself is 100 ft. long. All fittings and hardware, the work-board of five stations and foot-rail, are of nickel-silver. The bar-top is oil-treated mahogany, the whole top being of but three pieces. Broom, mop, and pail cupboards are formed in the pilasters and telephone alcoves in the spaces between the square constructional and rounded finish of corners. Fresh-air supply is brought in at the sides of the telephone alcoves and vitiated air taken through exhausts in ceiling. The ceiling is a light brown-grey. A beautifully composed and richly coloured decorative picture in the central lunette over the back bar, painted by Marion Powers Kirkpatrick, of Boston, is comparable with the work of Frank Brangwyn, and gives the necessary glowing note of colour that prevents what might otherwise be a somewhat sombre effect. The windows in the other lunettes are glazed with opalescent glass in simple panes. The flooring is of grey-gold and blue Rublino mosaic. The base is of black-and-gold polished marble. The entrances from the streets are lined with Pocahontas veined Alabama marble, with base and stair strings of Belgian black and treads and risers of grey Tennessee marble. The balustrades are of cast bronze, and the doors to the street are of kalameined bronze.

The floors and wall-lining of lounging lobby, and lavatories and partitions in same, also the stairs to main floor, are of Tennessee marble. The floors are of marble slabs set in strips of brass. The barber's shop is finished in white Alabama marble throughout.

On the main or upper ground floor, the lobbies, writing-rooms, and main entrance corridor — which forms the *dégagement* for the whole building— have floors of terrazzo divided into squares of approximately five feet by triple rows of cube mosaic, which also forms an inner border around them. A border of marble follows the lines and breaks of the dadoes, stairs, etc. The terrazzo floors are of grey colour with a light sprinkling of yellow and red chips. The mosaic cube strips, covering expansion joints every four feet in each direction, are pink Tennessee. The dado is composed of Belgian black marble for base, chair rail, and corners to principal piers, the panels being of red Numidian, with 3 in. borders of Tinos green marble.

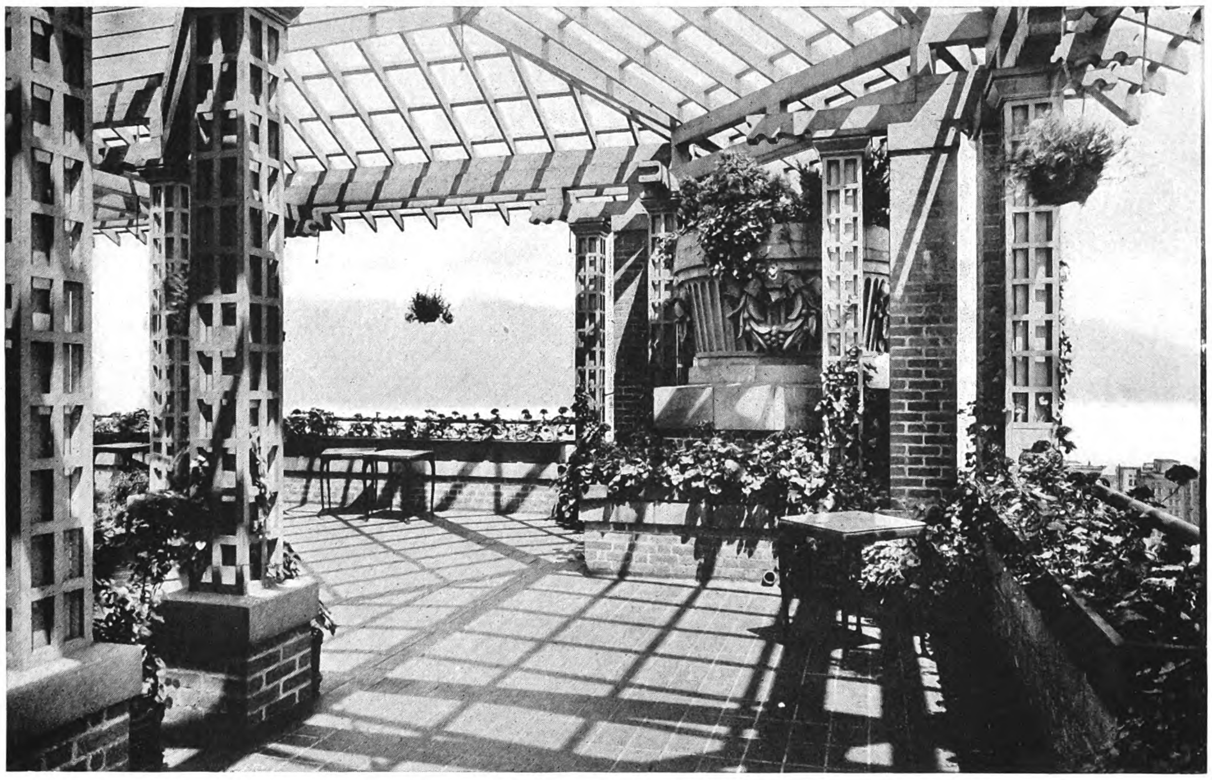
The *dégagement* is panelled above the marble dado in quartered Japanese oak, in which the medullary rays



THE GRILLROOM.

are fine and small. The entablature and balustrade above same are of the same material. The carving of the soffits of beams is applied, but the frieze, bed-mould, and consoles are carved in the solid. The ornamented vaulted ceiling is of fibrous plaster on metal lath. All ornament was cast or carved from models made by the architect and Mr. Victor André.

The ballroom dado has a base of black and gold marble, the dado and other wood finish being of Siberian oak. The balcony railings are of bronze-plated iron. Partitions glazed with plate-glass separate this room from the lobbies and *dégagement;* the solid partition on the west side is treated like the east side, but the glazing is done with mirrors. The ordinary entrances to the ballroom are from the *dégagement* and the raised foyer No. 2, from which it is separated by a balustrade. The walls of ballroom and lobbies are of painted hard plaster, with cornices run in plaster of Paris with cast ornament. The lobbies are painted with undercoats of raw sienna stippled with raw umber.



THE ROOF GARDEN.

The ballroom is decorated with painted ornament in grey colour over a body colour of raw umber; its ceiling light is of white rippled glass with a border of stained glass in tones of amber and green. The balustrades, balcony railings, and grille to musicians' gallery are of bronze-plated cast-iron. The electroliers are of gilt bronze and crystal. The spring dancing floor, of maple with oak and marble borders, is 66 ft. by 96 ft. The sitting-out space adds 20 ft. by 66 ft. when the room is used for banquets or assembly.

The floors of the foyers are similar to those of the lobbies and *dégagement.* The walls of foyer No. 1 are panelled in mahogany and silk tapestry; the partitions along the south side are glazed with mirrors. Private dining-room No. 1 is finished with mahogany woodwork, the walls decorated in tones of blue and the windows glazed with stained glass designed by Mr. George Greene, of Shields, Pa. The ceiling is of ornamental plaster of "cream colour." The foyer and private dining-room No. 2 have oak woodwork, and the ornamental ceilings and other plasterwork follow the general tone of the ballroom. The grey-brown tone employed generally throughout the lobbies is carried in a lighter shade in the background colour of the tearoom. This is surcharged with a stencilled decoration, which repeats the pattern and colour of the bronze grilles in the doors, which are used to shut it off from the *dégagement* when the tearoom is used for private functions. Moulded oak stiles and rails have been used to form panels and a dado to the walls; the ornament in the domed ceiling is gilded in old gold; the ceiling light is executed in Flemish amber glass. The columns and mantelpiece are of Pocahontas Alabama marble. The base is of Belgian black. The effect of the room will be greatly improved when a suitable picture is obtained to fill the space in the overmantel.

Lack of artists or skilled decorators, due partly to many having departed for the Front, made it necessary to draw the full-size stencils in the architect's office, and even to paint models for the workmen to copy. This incident will be noted with interest as a temporary reversion to the pre-specialist days of architectural practice, when the architect was perforce his own decorative designer.

Although conditions at Vancouver following the outbreak of hostilities caused the commandeering of the C.P.R. ships and loss of tourist travel, Lord Shaughnessy did not waver in his decision to complete the Hotel Vancouver according to the original programme. The steamers in question have, however, now been released. After refitting, they will again be placed in service between Vancouver, Japan, the Philippines, and China.

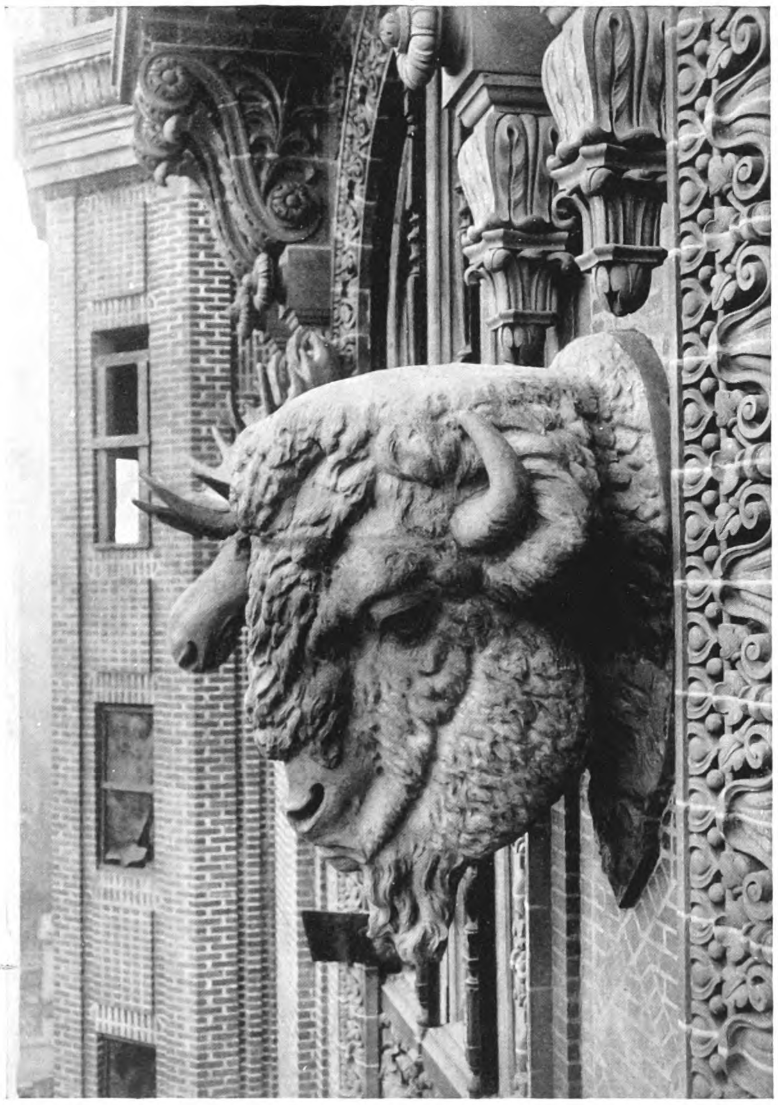
The Canadian Pacific has been the pioneer railway on the American continent to recognize and fulfil the need of good hotels as an important factor in passenger accommodation. Many travellers judge a railway quite as much by its buildings provided for their convenience and pleasure as by the speed, luxury, and frequence of trains or the scenery along its route. Many of the fine buildings of the Canadian Pacific in the east of Canada are architectural monuments to the foresight and vision of the earlier executives and directors of the Company, while the newer works in the west, including the Hotel Vancouver, provide some tangible evidence of the progress of development of the C.P.R. system, and the great ambition for, and confidence in, the future of Canada entertained by Lord Shaughnessy, the present President of the Canadian Pacific.

It is interesting to note that the hotel provided employment for nearly all the building mechanics over military age in Vancouver until the manufacture of munitions began to make a heavy demand upon labour. Lord Shaughnessy's decision to proceed with the building was one of high economic importance for the city of Vancouver at a very critical time. It was also a good business decision, because, since the completion of the hotel, the purchasing power of money in Canada has depreciated about 50 per cent., and it is thought that the depreciation will be permanent. It is certain that the hotel, which cost about £750,000, would involve to-day a sum considerably in excess of one million pounds sterling, and it will be difficult to duplicate the building at any future time for less than that amount.

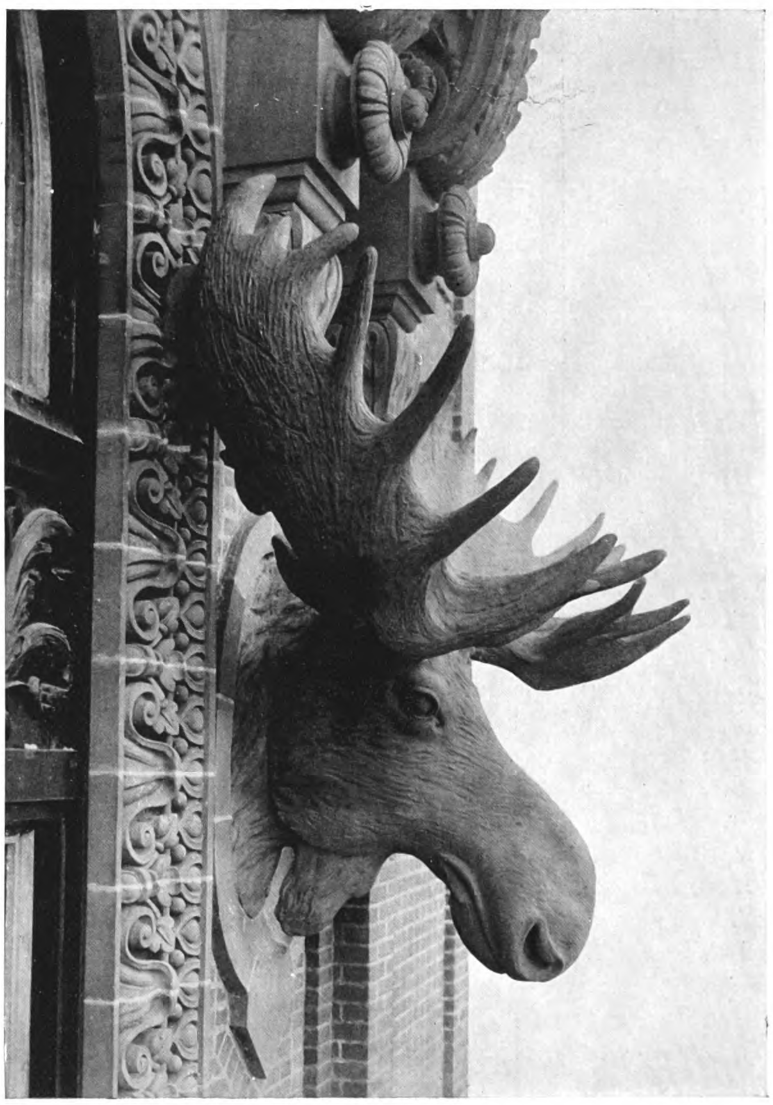
The hotel contains 600 bedrooms and 450 bathrooms. It is equipped with one of the most complete kitchens (with services and refrigerators) to be found anywhere in Canada or the United States of America.

The reinforced concrete work was carried out on the Kahn system. The terra-cotta, supplied by Messrs. Doulton & Co., Ltd., of the Royal Doulton Potteries, London, England, was manufactured from selected clays, to a particular tint, in accordance with the architect's suggestion and approval, so that it should blend with the special facing bricks used for the front. The combination of the two materials is very pleasing, and in the total effect forms a good example of the use of terra-cotta, a material which is well suited to the climate of Vancouver. It is of the same body throughout, and the slight variation in tint due to the natural face adds considerably to the architectural attractiveness of the façade. The terra-cotta work was carefully laid out, fitted, and marked before leaving Messrs. Doulton's works in England, and the fixing of the material proceeded with little difficulty when once the iron structure was erected. The architect records his opinion that the terra-cotta work is characterized by a high perfection of manufacture. All the models for the ornamental work, except those for the animals' heads, were made in New York under the personal direction of Mr. Swales. The animals' heads, illustrated below, were made by Messrs. Doulton under the direction of Mr. A. W. Martyn, from drawings and instructions by the architect and photographs of the clay models.

Mr. Francis S. Swales, the architect of the building, will be well remembered by our readers for his contributions to the REVIEW on American architecture and other subjects.



THE BISON HEAD.



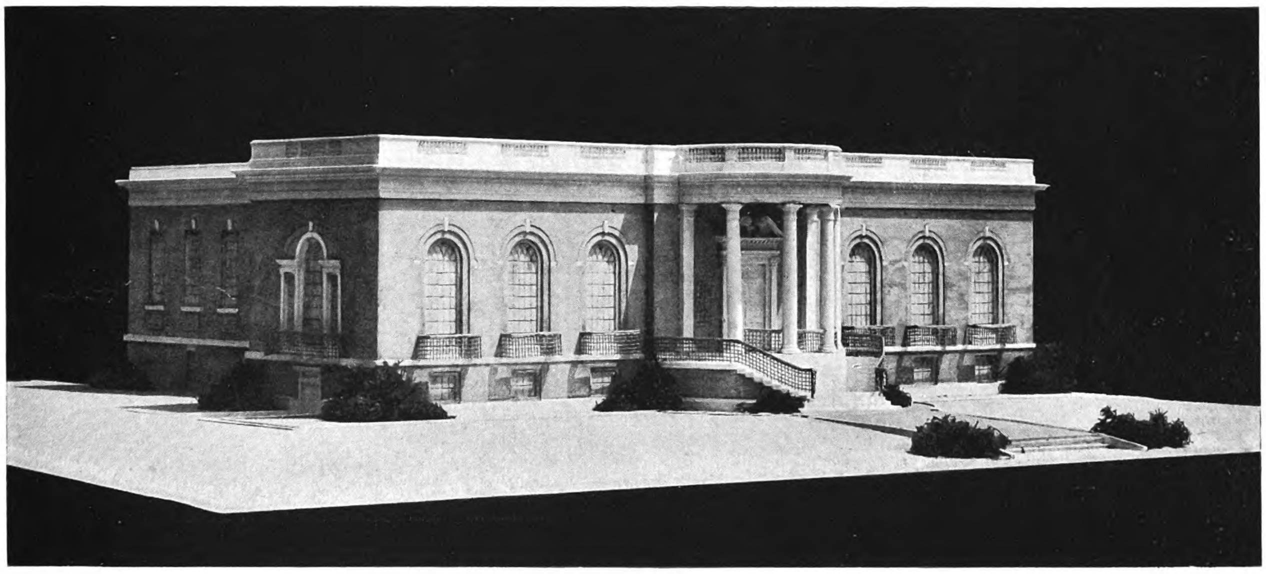
THE MOOSE HEAD.

AN AMERICAN PUBLIC LIBRARY.

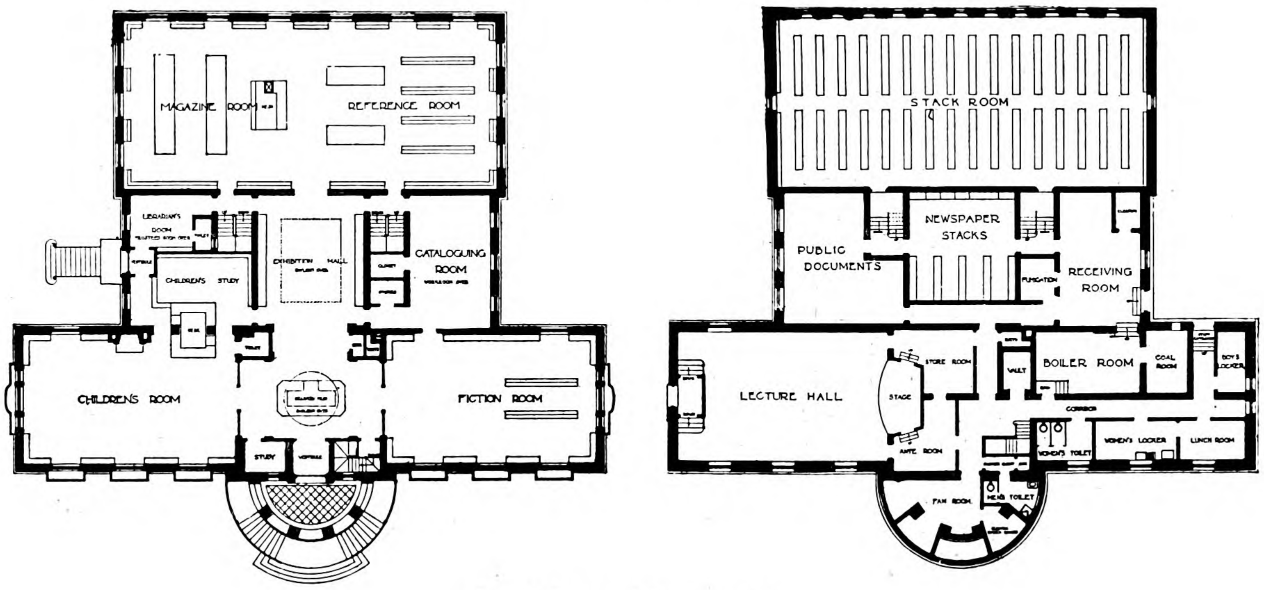
THE small public library is generally a very dull little building, lacking in architectural character, and spattered with poor ornament. Carnegie libraries up and down the country serve to illustrate this unfortunate fact. Yet it need not be so, if only the architect has sufficient ability for his task, and to show what can be done we illustrate the beautiful little building which has been erected at Waltham, Mass., from designs by Messrs. Loring and Leland.

We do not recall another modern building of its size and class that equals it in point cf composition, elegance, and arrangement. It owes much of its character to Colonial work and the domestic architecture of Late Georgian England, but it is no mere transcript in any part. Built of brick and limestone, it is delightful from every point of view; and while the general effect is immediately captivating, a closer study of its details only intensifies one's interest. The treatment of the front, with its semicircular porch and gracefully shaped steps, and the range of three trellis-headed windows on either side, seems to us quite perfect.

The details throughout are very refined, as may be noted in the capitals of the pillars, the iron balustrading, the entrance doorway, and the cornice with its balustraded parapet. The successful result was achieved only after the most careful study, and the making of a quarter-scale model (illustrated below) helped considerably in ascertaining beforehand what the design would look like in execution. The accompanying plans show the arrangement of the library. Supervision of the three public rooms is effected from the delivery desk, a desk between the children's room and the study gives control of both, and a third desk in the reference-room controls that portion of the building.



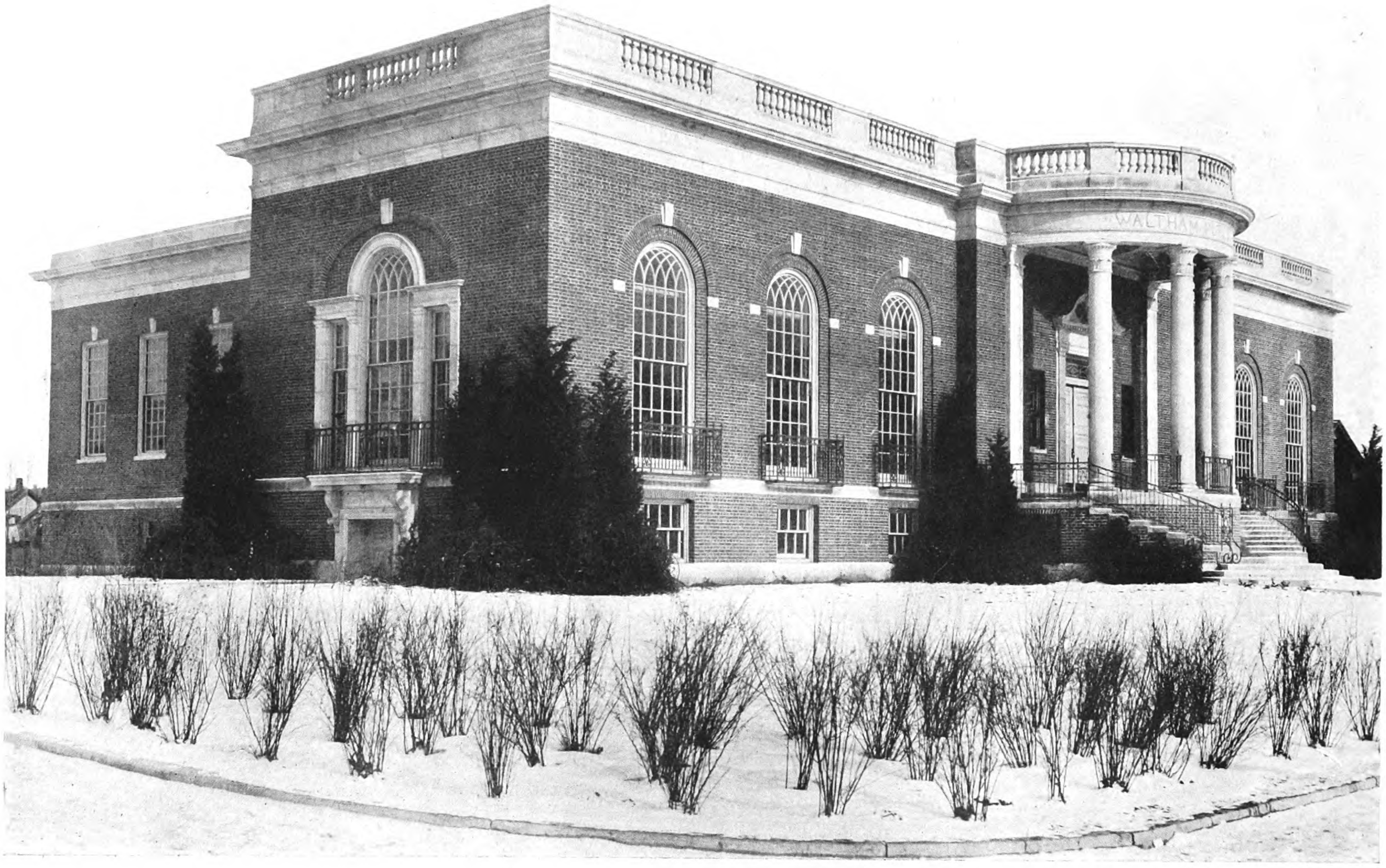
Scale Model.

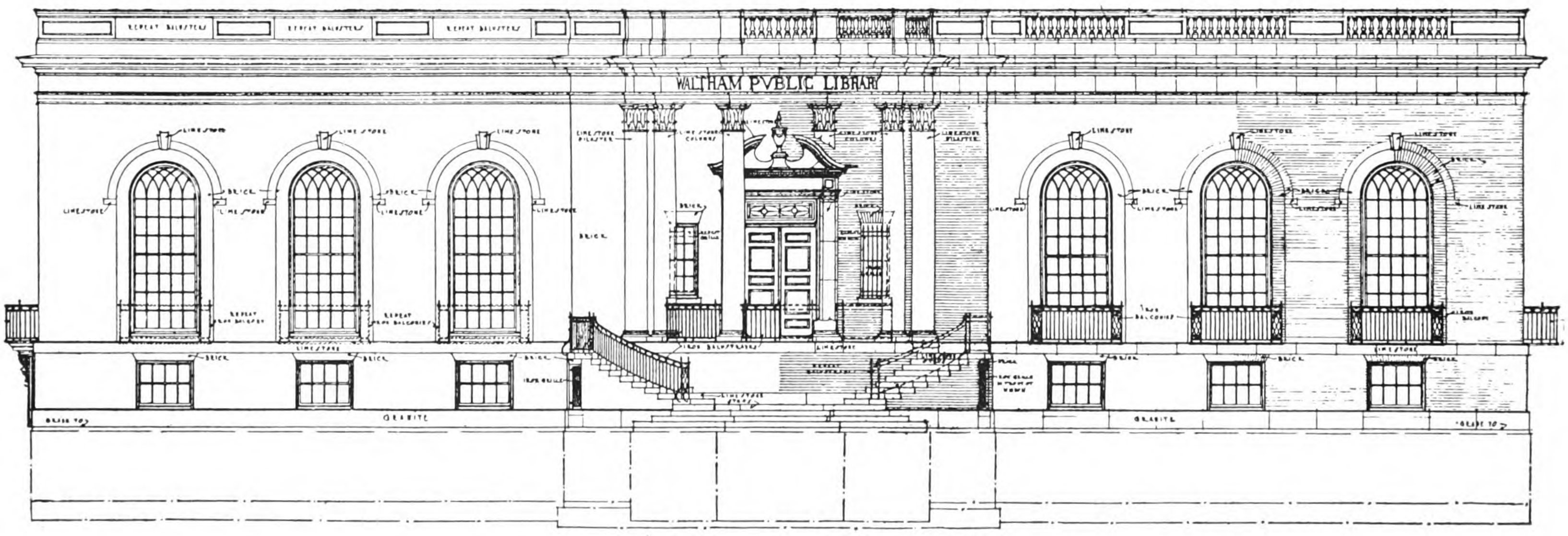


Ground Floor and Basement Plans.

PUBLIC LIBRARY, WALTHAM, MASS.

Loring and Leland, Architects.



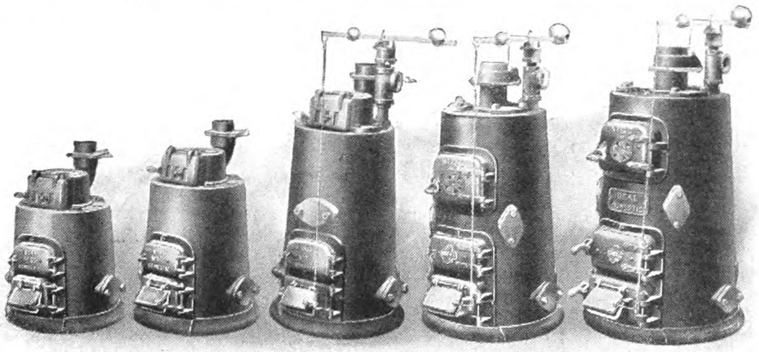


Front Elevation.

PUBLIC LIBRARY, WALTHAM, MASS.

Loring and Leland, Architects.

Economy in Hot Water Supply



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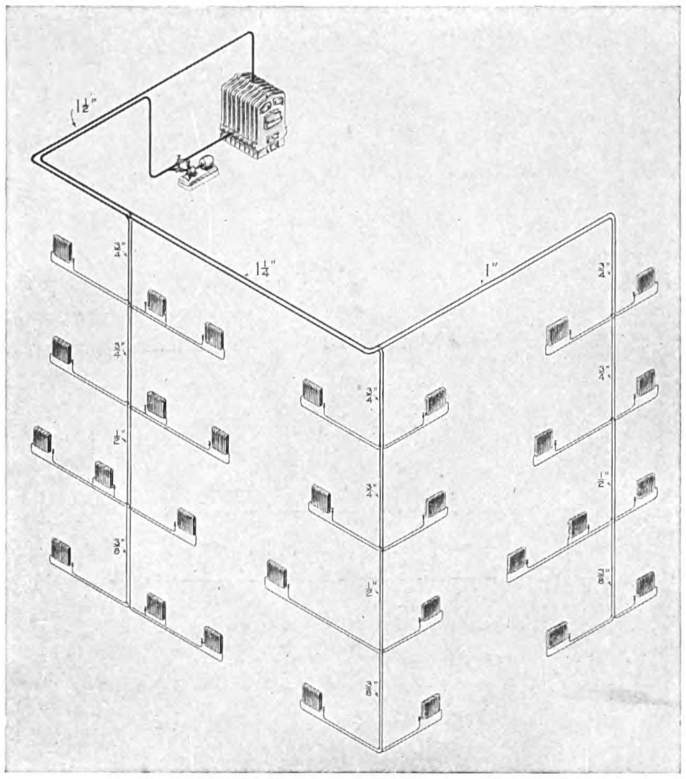

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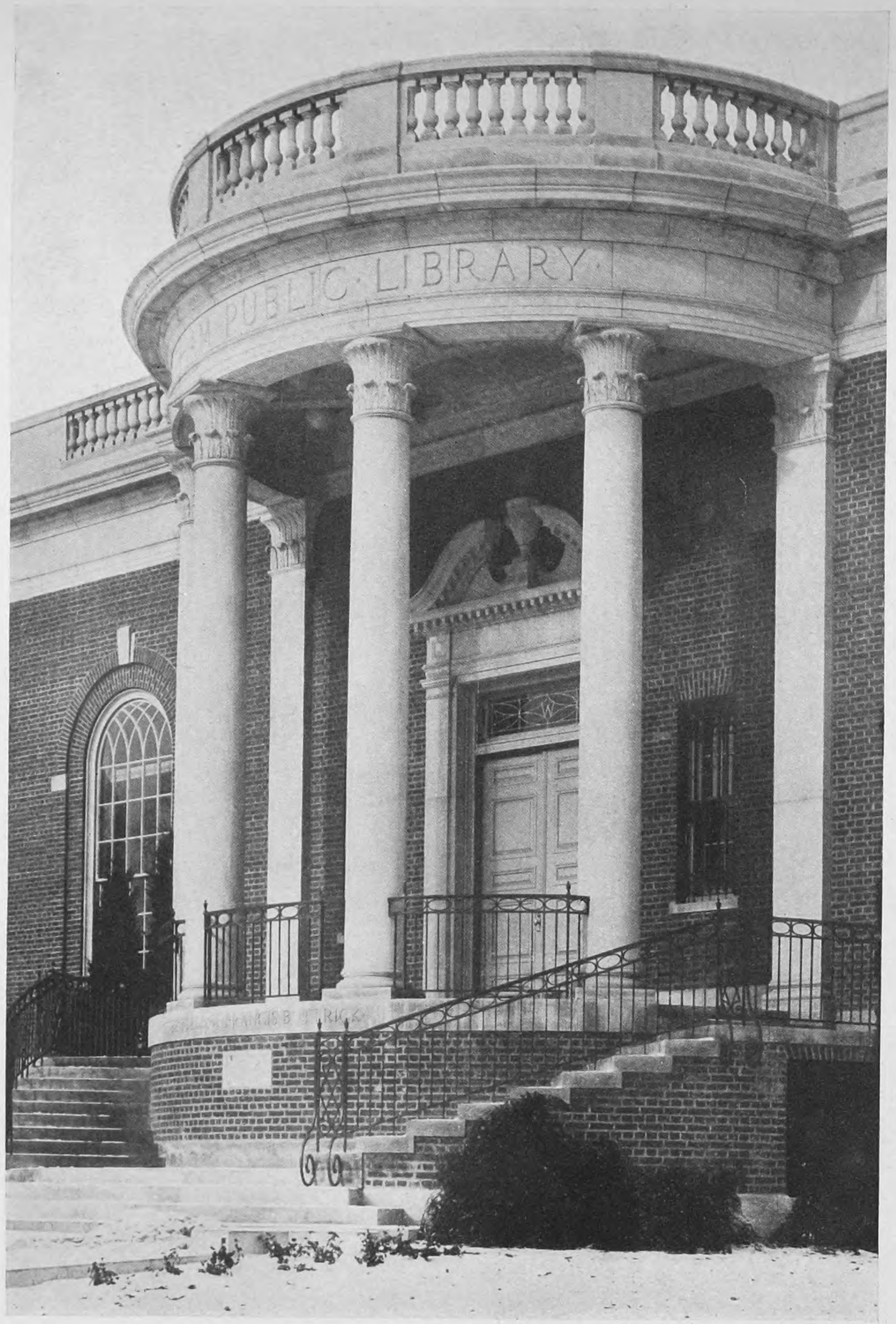
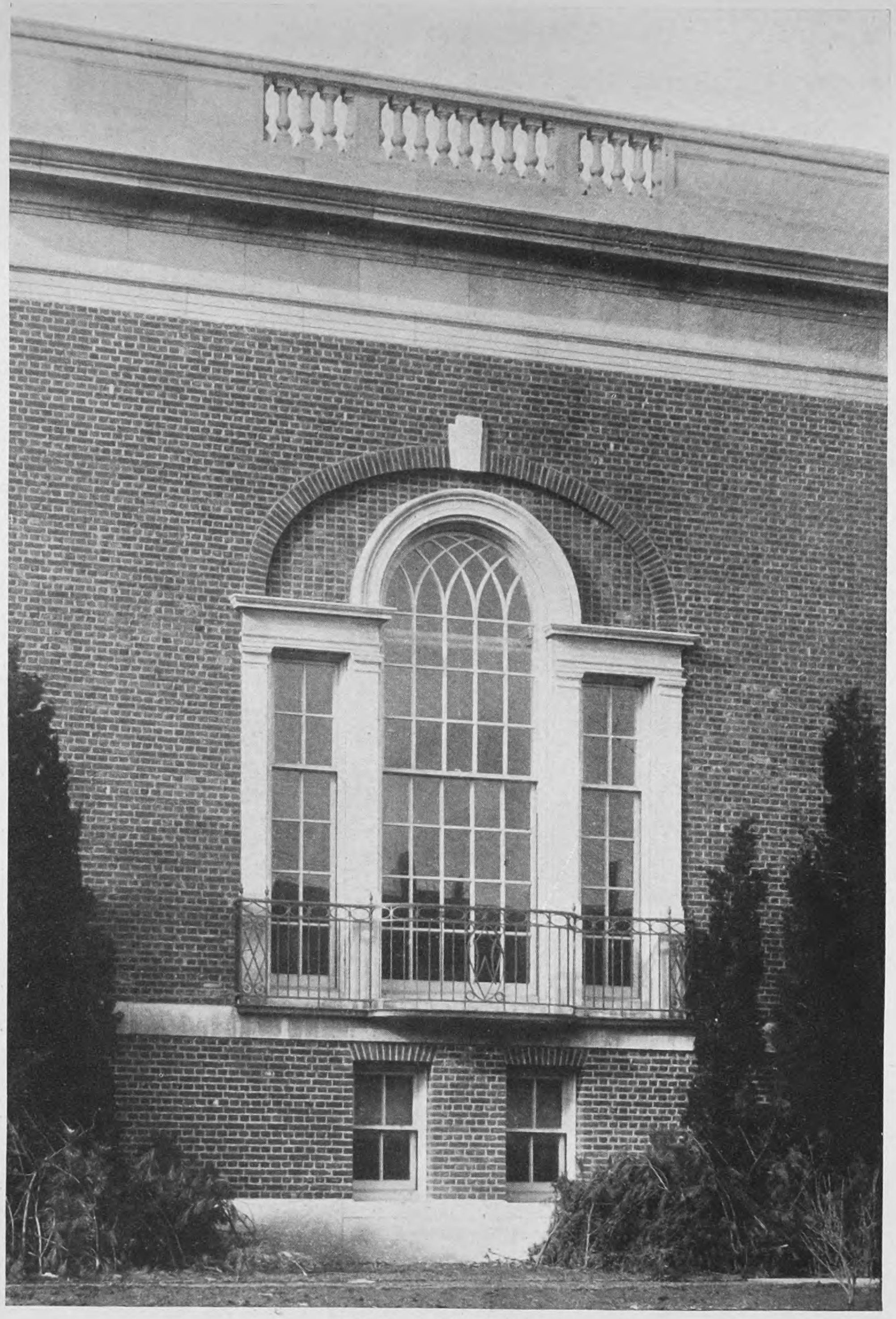


Entrance Portico.



Window to Fiction Room.

PUBLIC LIBRARY, WALTHAM MASS.

Loring and Leland, Architects

NOTES OF THE MONTH.

The Late Mr. Gerald Horsley.

It is with extreme regret that we note the death of Mr. Gerald Callcott Horsley. The son of John Callcott Horsley, R.A., he was educated at Cranbrook School, Kent, at Kensington School, and at the Royal Academy Schools. He was articled to the late Norman Shaw, R.A., was Owen Jones student of the R.I.B.A. in 1887 and 1888, and commenced practice in 1888 in Bloomsbury. He was President of the Architectural Association in 1911–12, and again in 1912–13, and was elected a member of Council of the R.I.B.A. in 1913–14, and hon. sec. of the Board of Architectural Education in 1913. He was one of the select band of contributors to the famous volume on "Architecture a Profession or an Art?" (1895), and the author of many papers on professional subjects. He designed St. Paul's Girls' School, Brook Green, Hammersmith; several churches in Staffordshire; the offices for the Universities Mission to Central Africa, Dartmouth Street, Westminster; some important domestic work in Surrey, Sussex, and elsewhere; and parts of station buildings at Harrow and Pinner. He was only fifty-five years of age. He was the brother, it will be remembered, of the late Sir Victor Horsley, the eminent surgeon, who died only last year with the army in Mesopotamia.

* * *

The Message of the Artists.

Many of the leading British artists have combined to show, in a series of lithographic prints, the aims of Britain and her Allies in the War, and also some typical and impressive aspects of the British effort against the enemy. The British aims are shown in a series of allegories, printed in colour. "The Freedom of the Seas" is rendered by Mr. Frank Brangwyn, "The Restoration of Belgium" by Mr. Clausen. Other subjects are undertaken by Messrs. Dulac, Greiffenhagen, Augustus John, Ernest Jackson, Gerald Moira, William Nicholson, Charles Ricketts, Will Rothenstein, Charles Shannon, and Edmund J. Sullivan. The British effort is typified in several series such as "Making Soldiers," by Eric Kennington; "Making Ships," by Mr. Muirhead Bone; and other series by Messrs. Frank Brangwyn, Clausen, Nevinson, Hartrick, Charles Pears, Will Rothenstein, and Claude Shepperson. The works are exhibited in the first instance in the galleries of the Fine Art Society, New Bond Street, London, for a period dating from 6 July, and afterwards in galleries throughout the country. Arrangements will also be made for their display in allied and neutral countries.

* * *

Preserving York Minster's Windows.

The recent taking out of the stained-glass windows in York Minster, in view of possible air raids, is a continuation of the scheme of the late Dean Purey-Cust for their cleaning and repairing. Before the War, as each window was renovated, it was replaced; but now, owing to the risks of damage by enemy aircraft, it has been thought wise to store the original windows and substitute plain glass, pending a return to normal conditions. Already there are nine of these plain glass windows, the originals being carefully preserved.

Fine Art and Utility.

In the course of his presidential address to the newly formed Institute of Scottish Architects, Sir Rowand Anderson expressed some interesting opinions on the subject of fine art and utilitarianism. "The great and only hope of architecture," he said, "lies with the public; they must ask for and insist on getting structures soundly and sanitarily constructed, and adapted to the purposes for which they are erected; then men able to carry out such buildings in an artistic and a truthful manner will, by reason of this determination, be called into existence. Architecture must cease to follow the transient literary and æsthetic fashions of the day; the absurd distinction of fine art from that which is useful or mechanical, and of architecture from building, and all the talk about applied art, must give way to that which is produced as in nature if we are ever to get into a clearer atmosphere of reality than now surrounds us, and we must put ourselves in line with the science of the day. Then we may look forward to erecting buildings fitly representing the ideas and wants of the age, with a constant succession of ever-varying expression and beauty, with natural dignity, and not artificial picturesqueness. That time may not be very far away. Ever since the penetration into Europe of the Arabian doctrine of the supremacy of reason over dogma, which many maintain to be one of the chief factors in the renaissance of learning and art, the world of thought has been in a state of transition. The causes that have been ceaselessly at work since then are now gathering great force, and the victory of reason and law seems assured. When that takes place art of every kind will be the material expression of it, and the great creative intellect of man, untrammelled by worn-out traditions, but utilizing all that is good and of universal truth in the past, will have free play, and the world will see structures greater, grander, and more useful than any that have ever existed."

* * *

Newcastle and the Old Infirmary Site.

Up to a recent date Newcastle was still persisting in its ill-conceived scheme of erecting public abattoirs on the site of the old infirmary. It is bad enough that what was at first dedicated to art should be given up to slaughter, but there is a more utilitarian argument to be urged. On the announcement that the Newcastle Sanitary Committee had prepared a scheme for abattoirs, a correspondent of the "Newcastle Chronicle" lodges a vigorous protest against "the erection of a building to accommodate such offensive operations in the very centre of a large city and upon the main road and artery east and west." The site, he declares, is worth at least £80,000—a sum that seems a great deal too large to be wasted on such a project. By "offensive," the correspondent probably means that the mere sight of an abattoir has that effect on sensitive natures; for it must be admitted that a modern scientifically constructed abattoir does not otherwise create much nuisance, although one must add the important qualification that the nauseating idea of it cannot be entirely suppressed. But, like the hospital, the factory, and certain other buildings, which are to be classed as necessary evils, the abattoir should be placed where it can be but little seen of men, and still less of women and children. As for flaunting its inherent indecency in the centre of a great city, that is an act of barbarism that should be forbidden by law.

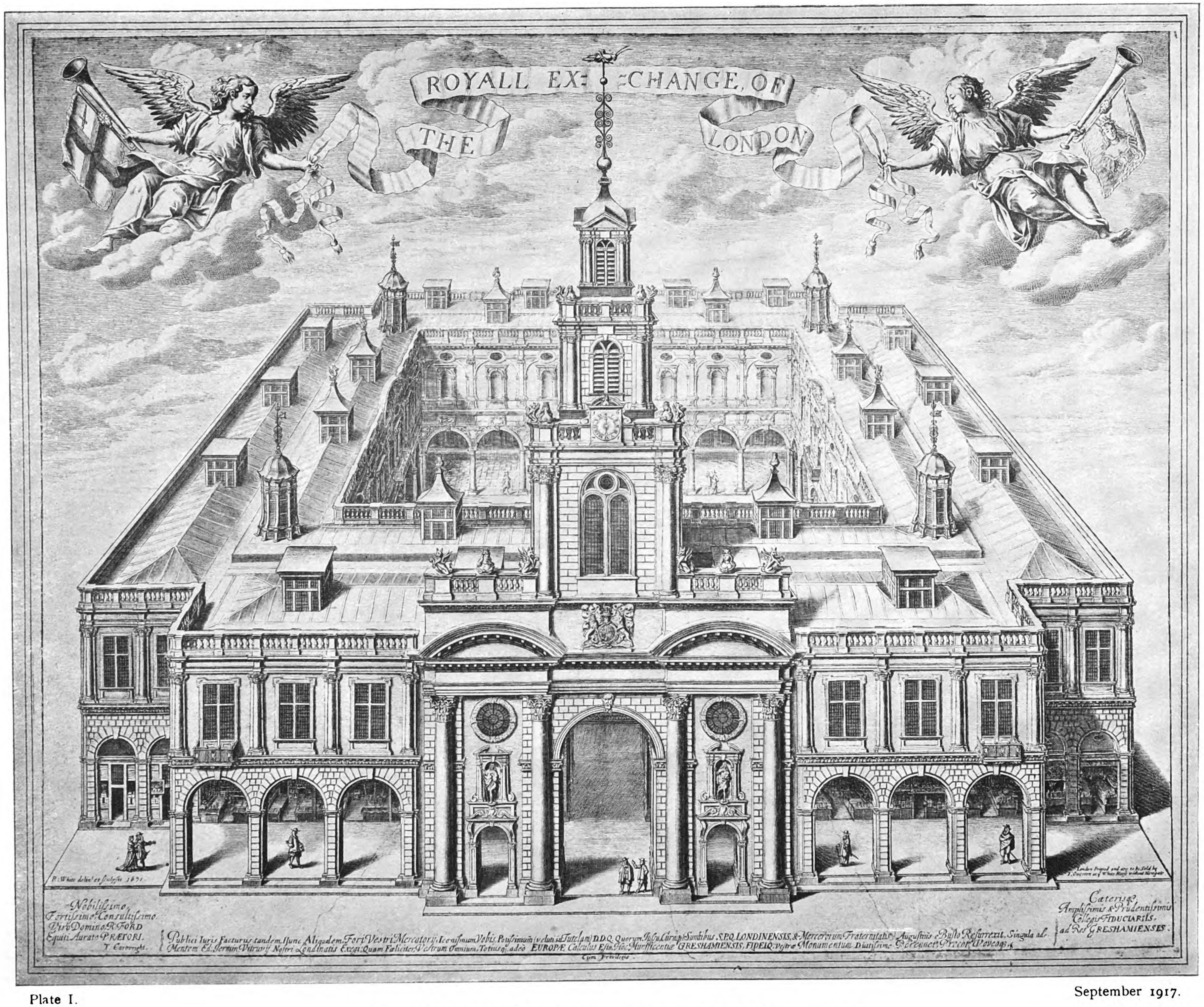

ROYALL EX- CHANGE, OF
THE
LONDON
R. White delin. et sculpsit 1671.
London Printed and are to be Sold by T. Overton at ye White Horse without Newgate
Nobilissimo, Fortissimo, Consultissimo Viro Domino R. FORD Equiti Aurato PRÆTORI. T. Cartwright.
Publici Iuris Facturus tandem, Hunc Aliqualem Fori Vestri Mercatorij, Iconismum Vobis, Potissimum (veluti ad Tutelam) D.D.Q. Quorum Jussu, Curaq; Sumtibus S.P.Q. LONDINENSIS, & Mercerorum Fraternitatis Augustius e Busto Resurrexit. Singula ad Mentem Ed. Jermin, Vitruvij Nostri Londinatis Exegi; Quam Fœliciter, Vestrum Omnium, Totiusq; adeò EUROPÆ Calculus Esto. Hoc Munificentiæ GRESHAMIENSIS, FIDEIQ; vestræ Monumentum Diutissime Perennet, Precor, Voveoqs.
Cum Privilegio.
Cæterisq; Amplissimis & Prudentissimis Collegij FIDUCIARIIS, ad Res GRESHAMIENSES.

Plate I.

September 1917.

BIRD'S-EYE VIEW OF JARMAN'S ROYAL EXCHANGE IN 1671.

From an Engraving by R. White.

THE ROYAL EXCHANGE, LONDON.—II. THE SECOND AND THIRD BUILDINGS.

By ARTHUR STRATTON, F.R.I.B.A.

(*Concluded from p.* 29, *No.* 249.)

NOT only was Wren's fine proposal rejected, but, his hands being too full with other matters, he was relieved of responsibility for the design of the new Exchange, and on 2 November 1666, Mr. Hook, Mr. Mills, and Mr. Jarman, the City Surveyors, were requested to prepare an estimate for the rebuilding.* Early in the following year it was agreed that the new building should be erected on the old foundations, and Edward Jarman was appointed architect, Wren undoubtedly exercising a general control. In September the design was submitted to the King with a request that the south-west angle might be extended into the street, a request which seems to have been ignored, and on 23 October the base of the column on the west side of the north entrance was laid by Charles II. It is a curious fact that, although nothing was spared to ensure the provision of a building suitable for its uses and expressive of its purpose, no steps were taken to open up the site in such a way that its axis was on any main line of approach. It was still hemmed in on two sides, and was so hidden that Ralph was doubtless justified when he wrote in 1734 "there are very few of our fine pieces of architecture in sight; they are generally hid in holes and corners, as if they have been built by stealth or the artists were ashamed of their works"—a criticism that unfortunately applies even now to many of the best buildings in London.

The second Exchange was spacious as regards standing room in the open courtyard; but with all its attractions it was felt as the eighteenth century progressed that it was not all that was to be desired in a city of the magnitude of London. That Jarman made the most of his opportunity is evident from records of the building made before it perished in the fire of 1838; but ideas of civic grandeur in architecture developed, and the second Exchange was quite as inadequate at the end of the eighteenth century as Gresham's would have been had it survived.

Jarman, who also rebuilt Drapers' Hall and Fishmongers' Hall immediately after the fire of 1666,* seems to have died before 28 November 1668, on which day Cartwright, his master-mason—who carried the work to completion in 1669—declared himself "master of the whole designe." According to Walpole, a certain William Lightfoot (died c. 1671) also had "some share in the Royal Exchange," but it must have been a very small share for other authorities to have ignored him completely.

The ground covered by the new Exchange measured about 203 ft. by 170 ft., and the accompanying plan (p. 46) shows its arrangement. Considerably more accommodation was provided than in Gresham's building, and wide staircases led to a gallery that ran round the whole building. This gallery was

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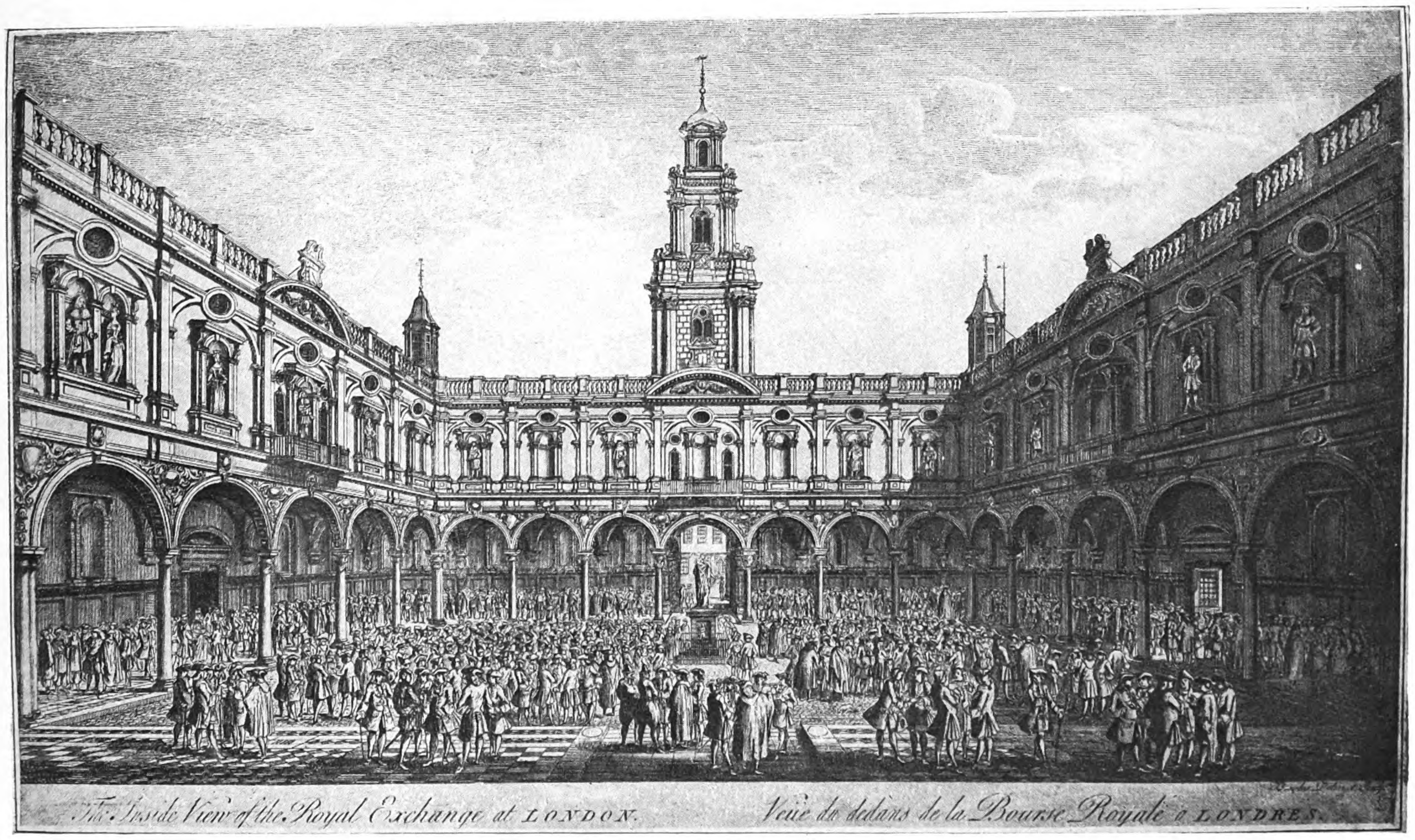
* Journal of the House of Commons. Quoted in Angell's "Historical Sketch of the Royal Exchange," 1838.

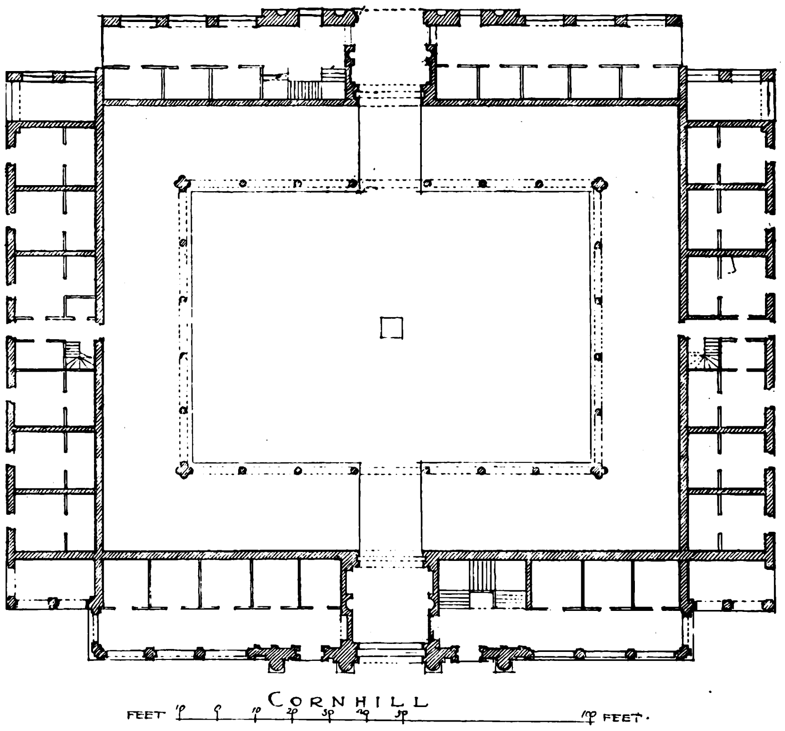
* William Herbert. "History of the twelve great Livery Companies of London," 1837.


The Inside View of the Royal Exchange at LONDON.
Veüe du dedans de la Bourse Royale à LONDRES.

VIEW IN THE COURTYARD OF JARMAN'S ROYAL EXCHANGE.

From an Engraving by Bowles.

originally divided into a number of shops, stored with the richest and choicest sorts of merchandise—thus perpetuating the tradition of the Elizabethan "pawne"; but before 1740 the shops were cleared away and the rooms more appropriately occupied by assurance companies, "Lloyd's," and several merchants' counting-houses. After 1768, when the original Gresham College was pulled down, some of the rooms on the south-east side were made available for the reading of the Gresham Lectures. John Macky in 1714 described the building as "a very handsome Square, consisting of Eight and Twenty Columns, convenient for the Merchants to walk in, to be free from the Rain and Sun, besides the Space in the Area, which is about an Acre. You enter into it," he says, "by Two Sumptuous Gates fronting south and north; on the Right of the South, under the Columns, are the walks of the Spanish, French, Portuguese, Italian, and Jewish Merchants; and on the Left, those of the English American Plantations. At the North-gate, the Irish and East-Country Walk is on the Right as you enter; on the Left, the Scotch and Germans; and in the Middle of the Open Space, the Citizens and Brokers of London." The assemblage of merchants from so many parts of the universe in their different dresses afforded a spectacle which was a constant source of wonderment, and from Macky's description it is evident that the traditional "walks" allocated in the sixteenth century were still observed. They were paved with black and white marble, while the central area was paved with small stones commonly said to have been the gift of a merchant from Turkey (see illustration on page 45).



PLAN OF THE ROYAL EXCHANGE AS REBUILT BY EDWARD JARMAN.

Traced from a Drawing made in 1672.

Addison gives a good idea of what the Exchange meant to the Londoner of his time. "There is no place in the town," he says, "which I so much love to frequent as the Royal-Exchange. It gives me a secret satisfaction, and, in some measure, gratifies my Vanity, as I am an Englishman, to see so rich an Assembly of Country men and Foreigners consulting together upon the private Business of Mankind, and making this Metropolis a kind of Emporium for the whole Earth. . . . This grand scene of Business gives me an infinite Variety of solid and substantial Entertainments. When I have been upon 'Change, I have often fancied one of our old Kings standing in Person, where he is represented in Effigy, and looking down upon that wealthy Concourse of People with which that Place is every Day filled. In this Case, how would he be surprized to hear all the Languages of Europe spoken in this little Spot of his former Dominions, and to see so many private Men, who in his time would have been the Vassals of some powerful Baron, negotiating like Princes for greater Sums of Mony than were formerly to be met with in the Royal Treasury."* The effigies he refers to had been a feature of the first Exchange no less than of Jarman's, but the statues seen by Addison were mostly the work of Caius Gabriel Cibber, father of Colley Cibber. That of Gresham, however, was by Edward Pierce, and the statue of Charles II in the centre of the courtyard, raised on a pedestal 8 ft. high and enclosed by iron railings, was the work of Grinling Gibbons.* Of the twenty-four niches round the courtyard, seventeen were filled in 1714 with the Kings and Queens of England "from Edward the First, bigger than Life, Adorned all with their Ensigns of Royalty, except that of King James the Second, who is in the figure of a Cæsar with a Battoon in his Hand." At a later date statues of the first two Georges by Rysbrack were added, and in due course the reigning sovereigns were set up, while niches were found for Sir Thomas Gresham and Sir Joseph Barnard. Some of these figures were gilt, and they doubtless presented an imposing array. The covered walks had groined ceilings springing from a series of carved corbels over the columns and along the back walls, the bosses appropriately displaying either the City arms or the arms of the Mercers Company (see illustration on page 47).

The building was constructed of Portland stone throughout, with the exception of the upper part of the tower over the principal entrance on the south front. This tower rose to a height of about 180 ft. in three receding stages, and although in the mass it may have been satisfactory it was not without faults, especially in the hybrid character of the window openings. The four lantern lights seen rising high above the angles of the main roofs are said to have been fitted with weather-cocks which communicated with wind-dials in the interior of the building. From Cornhill the building composed well, and with the dome of St. Paul's in the distance made up a picture which was a favourite subject among artists (Plate II). That shops should have been allowed on either side of the principal entrance, protruding on to the pavement, is no credit to the authorities of those days. The commercial instinct apparently could not be restrained, and a thriving trade seems to have been carried on by book and print sellers, watch and clock makers, and others who missed no opportunity of proclaiming that

The shops round the 'Change, the great centre of Trade,
Are the shops for good things, there your money's well paid.

In 1767 nearly the whole of the western side had to be rebuilt under the superintendence of Robinson, the City Surveyor, and the tower appears to have always been in a more or less dilapidated state. Various alterations were carried out from time to time, but by far the most interesting was undertaken about 1820, when it was decided to take down

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* "The Spectator," 19 May 1711.

* According to J. P. Malcolm's "Londinium Redivivum," 1803, this statue by Gibbons "was a few years since replaced by another by Spiller."

Jarman's timber-framed steeple and to erect a stone one in "purer taste." The architect for this difficult transformation was George Smith, and the illustrations on Plate II and page 48 show how he led up from the free Palladian substructure to his own matured Classic. The segmental or "compass" pediments were removed and a horizontal entablature substituted. Above a strongly marked attic, the tower rose over the centre archway to a considerable height, the plan form changing from a square in the lower stage to an octagon and finally to a circle, surmounted by a stone cupola. The composition was characteristic of the times which produced it, and accordingly made provision for a display of emblematic sculpture; the panels on the flanking attics were filled with bas-reliefs, on the one side representing Elizabeth with attendant figures and heralds proclaiming the original building, and on the other side Britannia seated amongst the emblems of Commerce accompanied by the Arts and Manufactures. A niche in the centre of the lower stage of the tower contained a full-length statue of Gresham, and his memory was further perpetuated by the grasshopper vane at the summit.

Although by no means lacking in dignity, Smith's cupola was promptly anathematized as belonging to the "pepper-box" order, and laments were heard on all sides at the loss of the old steeple which one writer referred to affectionately as a well-shaped but whimsical old structure.* George Smith was architect to the Mercers Company, and in 1843 he built a new Gresham College at the corner of Basinghall Street in Gresham Street, but fate has not dealt kindly with his work. Once more the Royal Exchange was burned to the ground, and on 10 January 1838 it was reduced to a desolation something like Balclutha's. Its destruction gave opportunity for a more monumental building, and at last brought nearer the long-looked-for improvement to be obtained by the widening of Threadneedle Street and by making the front of the Exchange parallel to the Bank. This improvement was carried out in accordance with the provisions contained in an "Act for Improving the Site of the Royal Exchange in the City of London and the Avenues adjoining thereto," which received Royal assent on 10 August 1838. It was at last realized on all hands that the Royal Exchange should be made "the nave or center of the Town," as Wren had expressed it, but much negotiation was necessary before it could be an accomplished fact. It was felt, too, that from its situation in the very heart of stirring and living commerce, amidst the turmoil of speculation, the design should at all costs be reposeful and dignified in character, expressive in every way of the opulence of a capital city.

The merchants had once more to seek a temporary home. The South Sea House received the members of "Lloyd's," whilst the court of the Excise Office, formerly the court of Gresham's house and subsequently of Gresham College, accommodated the general mercantile body, as it had done before on the occasion of a similar calamity. The Gresham Committee were not slow to take steps towards erecting a new Exchange on the improved site, and in 1839 a competition for the design was instituted, but as this proved abortive much time was lost. The Néo-Grec movement had well-nigh run its course; the leading British architects were men of scholarly attainments, well versed in the Classic tradition in architecture which had transformed most cities both here and on the Continent. But the problem was an exceptionally difficult one

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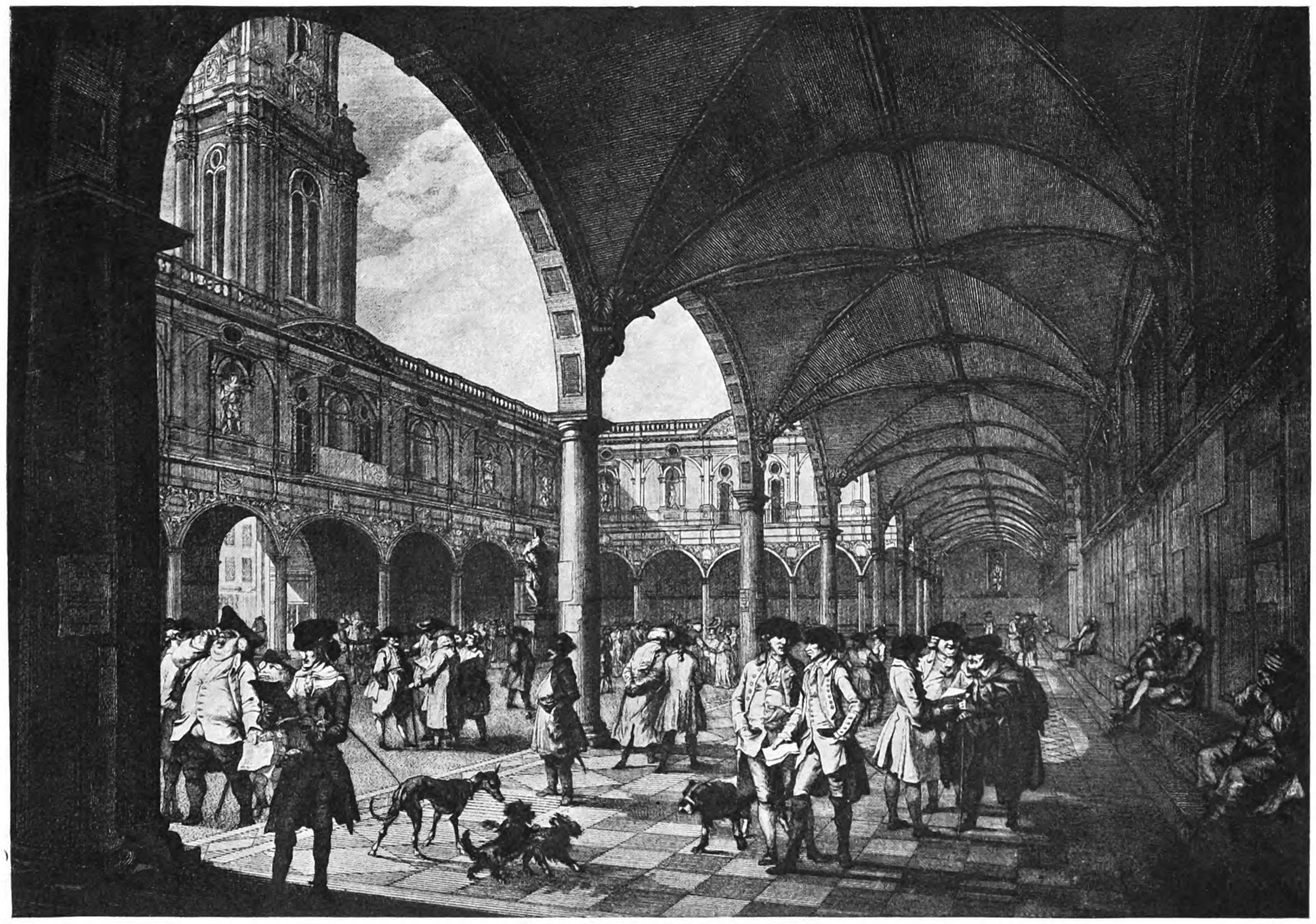
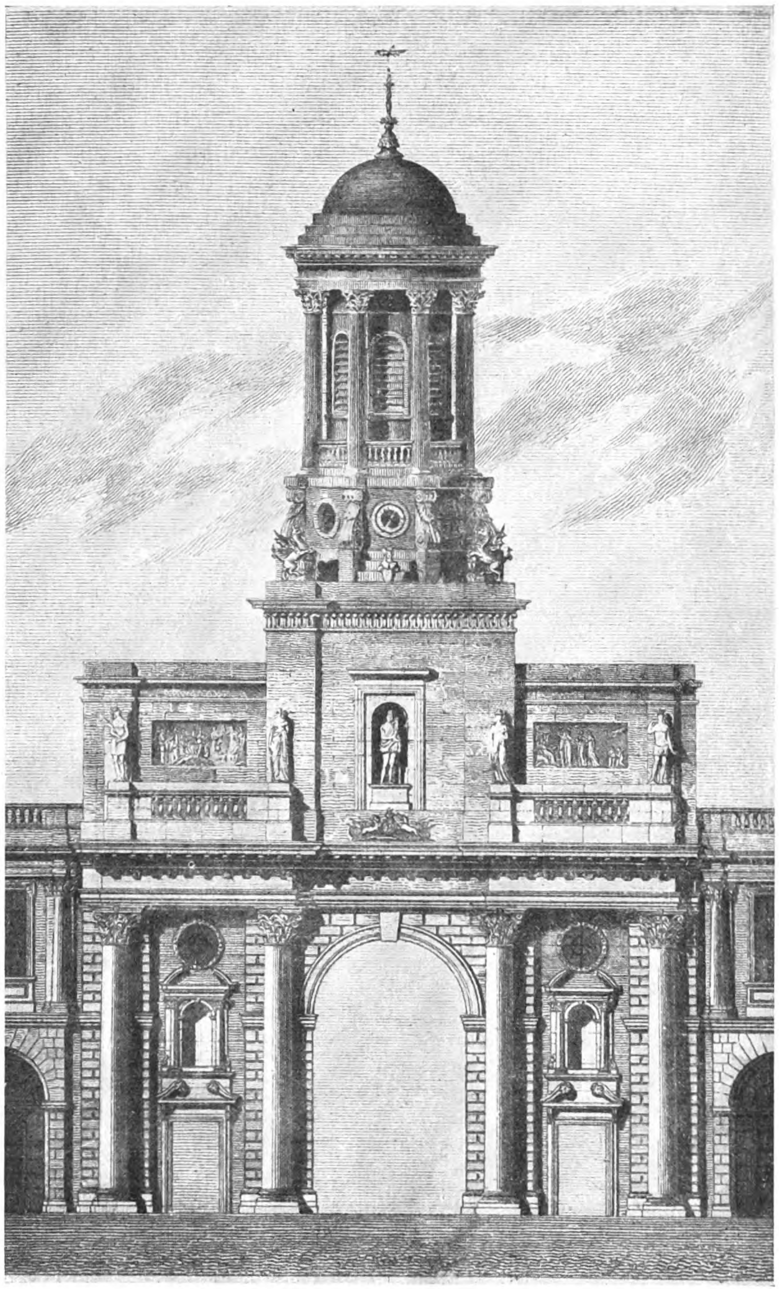
* "The Gentleman's Magazine," 9 August 1821



IN THE ARCADED COURTYARD OF JARMAN'S ROYAL EXCHANGE.

not only because of the peculiar shape of the site, but rather because the architect was expected to produce a masterpiece without exacting too great a sacrifice of valuable space. A second competition was held—limited to Sir Robert Smirke, Gwilt, Barry, Tite, and Cockerell—and controversy raged for some time over the respective merits of the designs submitted by the two last-named architects. Cockerell's design, though unquestionably the finer of the two if the whole *place* and its surroundings are taken into consideration, was eventually laid aside in favour of Tite's, and building operations were begun in 1841. The selected plan is masterly in its simplicity, and the placing of the portico leaves nothing to be desired. The tradition of the galleried courtyard still persisted, but it seems extraordinary that at a period when the majority of those using the building must have had experience of the unsuitableness of the hypæthral arrangement in this climate, the central area should have been built without any covering. The building had not been in use many years before an agitation was set on foot to remedy this defect, as the rain and snow falling in an open area 53 ft. wide and nearly twice as long occasioned discomforts which modern business men would not tolerate. In the "City Press" of 1881 appeared the announcement that "The Gresham Committee have expressed their willingness to accede to the wishes of merchants, bankers, and others who lately memorialized them on the desirability of covering the Royal Exchange with a glass roof." Several schemes were brought forward from time to time, but none of them seem to have promised to achieve the double object of protecting the centre area from the weather and of interfering to an inappreciable extent with the lighting of the offices around the courtyard. Finally a limited competition was held, and Charles Barry produced a design which, meeting with general favour, was carried out in the years 1883–84. The interior perspective reproduced on page 50 shows the arrangement of this domical iron and glass covering and the clever way in which it was made to harmonize with the arcaded substructure.

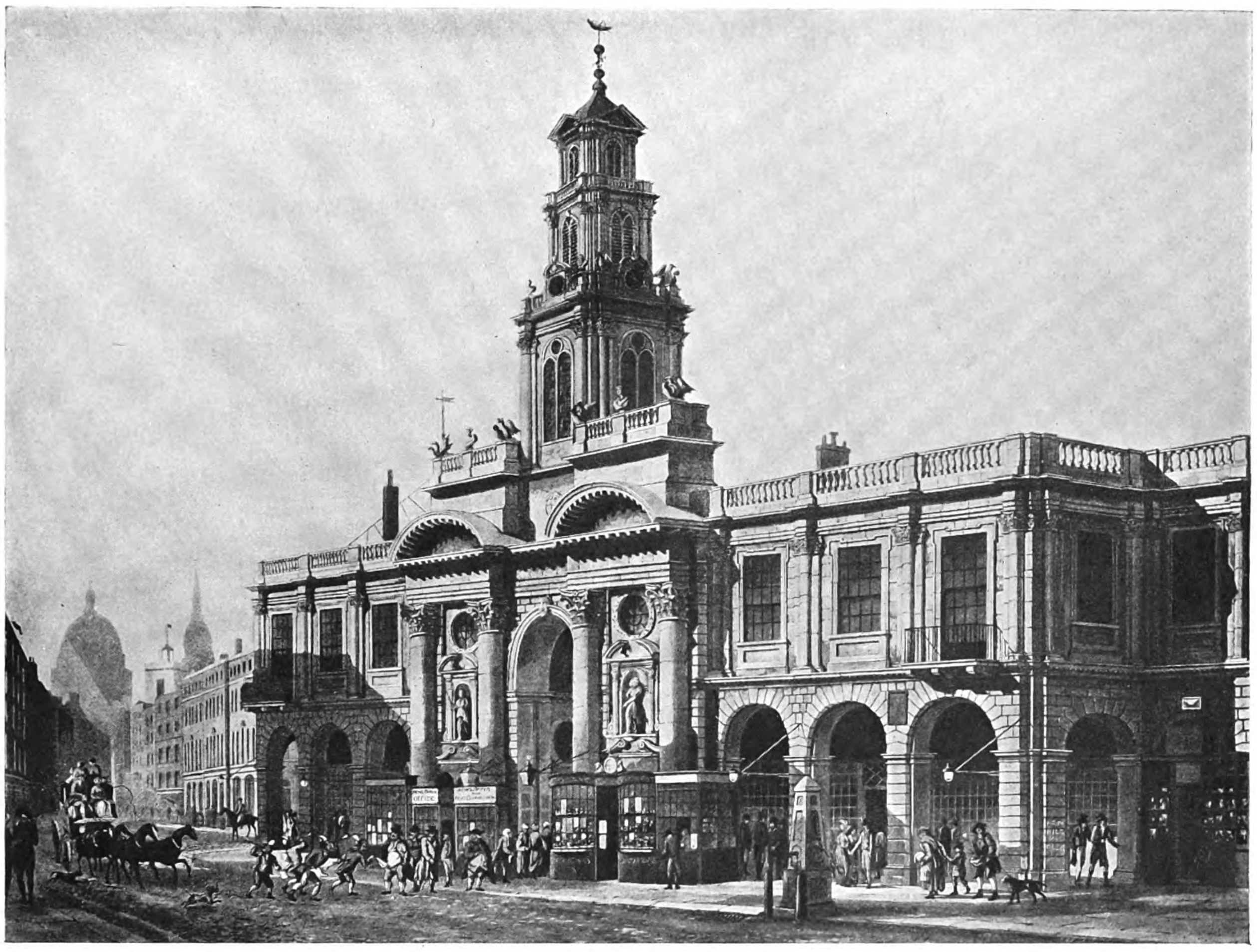
Sir William Tite drew much from Italian sources, and whilst following the tradition of the Classic school, of which he was one of the most matured exponents, he showed how it was possible to solve a modern problem without strictly following either Greek or Italian precedents. Amongst the men who were working in his office during the erection of the Royal Exchange was C. F. Porden, a Néo-Grec enthusiast who had been long under the spell of the Inwoods, and was familiar with pure Greek detail. Tite's portico owes not a little to that of the Roman Pantheon: its elevated position and ample dimensions impart a stateliness and an air of prosperity thoroughly appropriate to the occasion (see illustration on p. 49). The sculptures on the pediment alone fall short of the standard of excellence maintained in the architecture. The younger Richard Westmacott, R.A., who executed them, lacked that architectonic sense possessed by the great sculptors who did so much to ennoble the masterpieces of Gandon, Smirke, Laing, Cockerell, and others. The figures are too detached, and do not appear to have been composed with the supreme idea of filling the triangular space to the best possible advantage. Westmacott's work here undoubtedly lacks distinction.



ELEVATION OF THE PRINCIPAL ENTRANCE TO THE ROYAL EXCHANGE FROM CORNHILL, AS REMODELLED BY GEORGE SMITH IN 1821.

The Exchange provides a fine background for Chantrey's bronze equestrian statue of the Duke of Wellington which was set up in 1844. Its effect, however, is spoiled by the medley of lamp-posts and the railed-off entrances to the Central London Railway; these and other unsightly excrescences mar what has been described as the "London Forum" and tend to detract from the grandeur of Tite's frontispiece, but in spite of these drawbacks it more than holds its own amongst its surroundings. The east front is some 56 ft. wider than the west, and the clock tower was wisely relegated to the centre of this front; those who stop to admire its lines still find a reminiscence of the original founder in the statue of Gresham and the grasshopper vane; the finely designed and executed iron gates are deserving of careful study. That the spaces between the Corinthian pilasters on the flanks have been occupied by shops from the first is obvious; but whereas the fronts were originally deeply recessed, a certain loss of play of light and shade has been occasioned by bringing them forward to their present position.

No account of the third and existing Royal Exchange would be complete without reference to the series of fine historical paintings which occupy the large panels in the walls of the ambulatory. Nineteen of these panels are already filled, five only remaining empty. The paintings are all representative of the history of the City, the subjects being as follows: "Modern Commerce," by Frank Brangwyn, A.R.A.; "The



THE FRONT OF THE ROYAL EXCHANGE TO CORNHILL IN 1816.

Edward Jarman, Architect. T. H. Shepherd, Engraver.

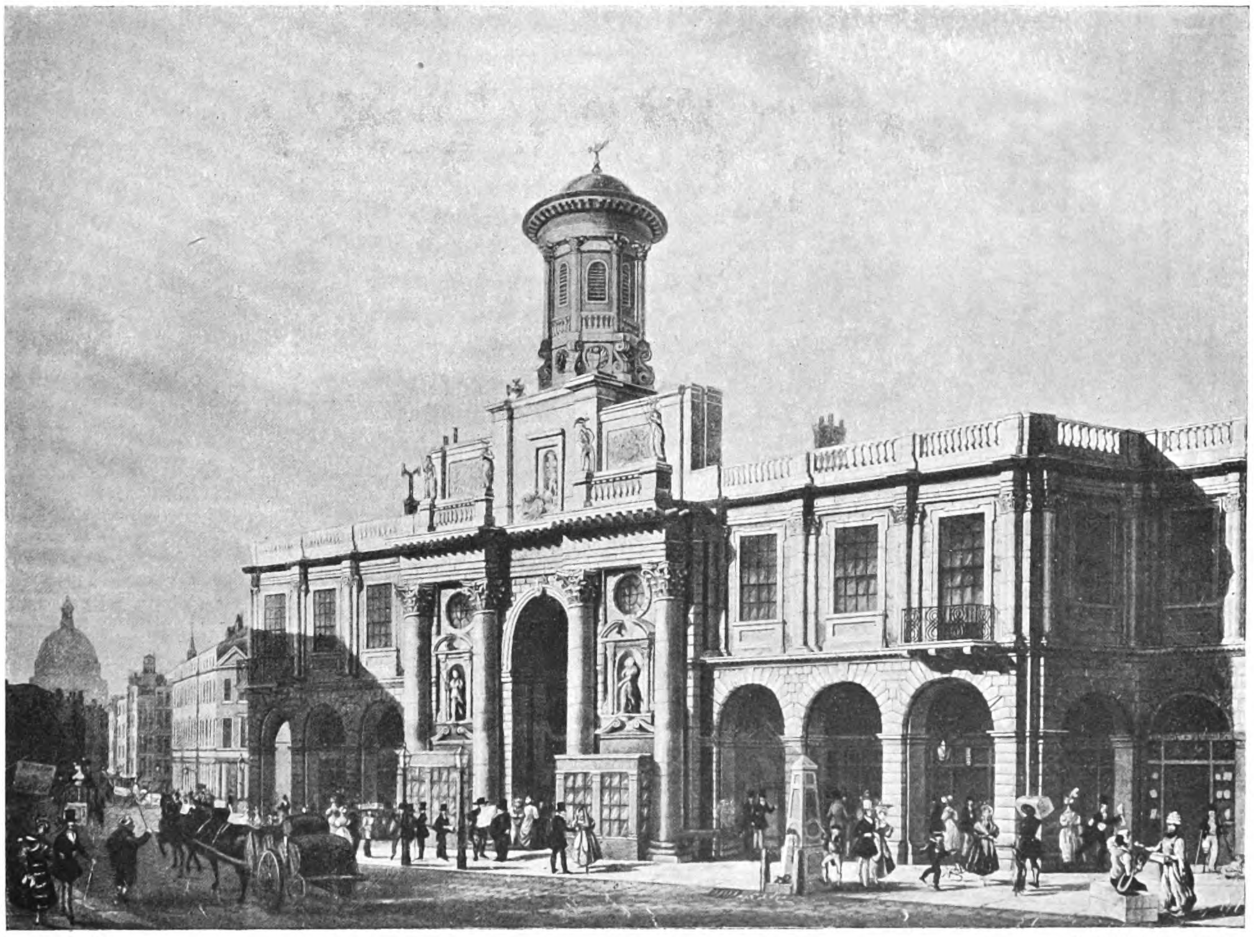
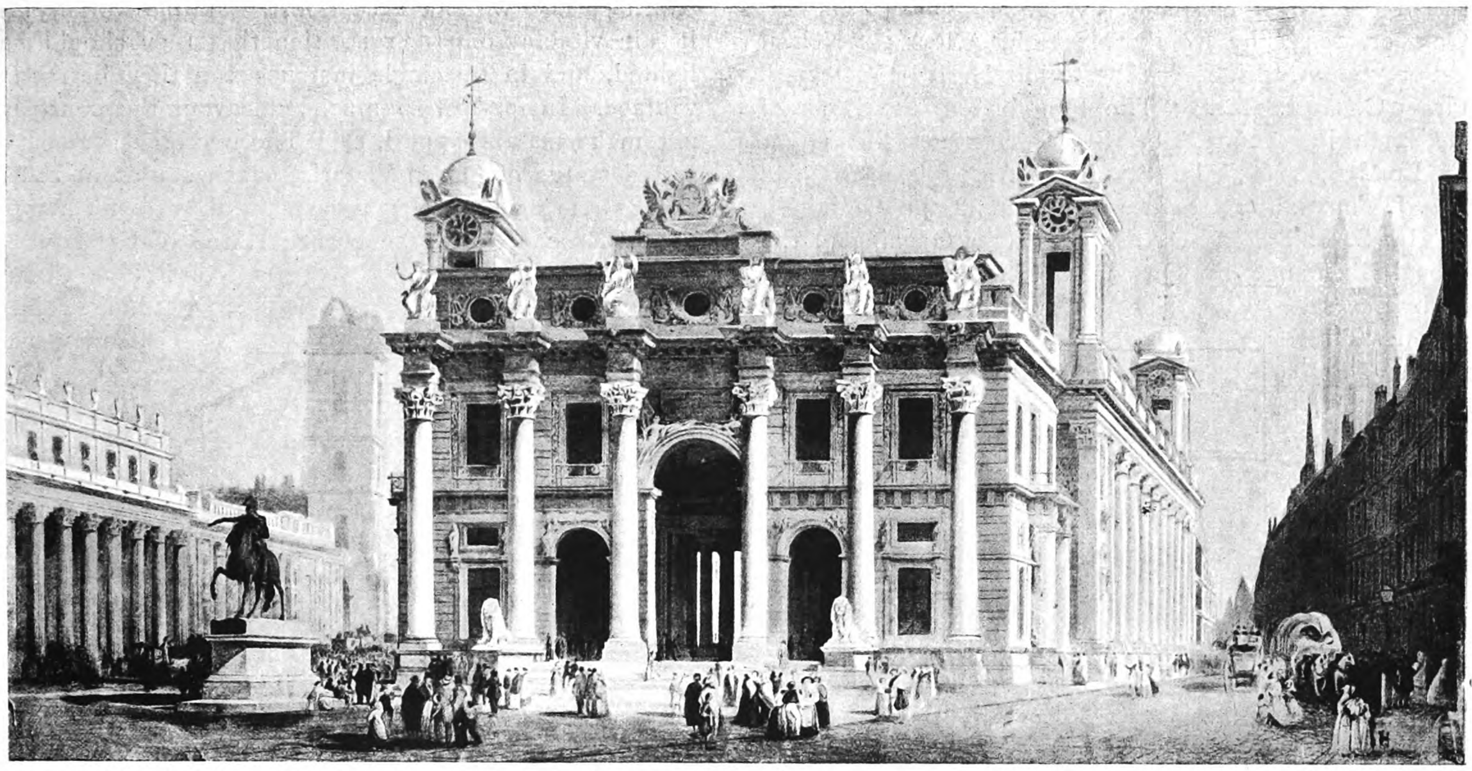
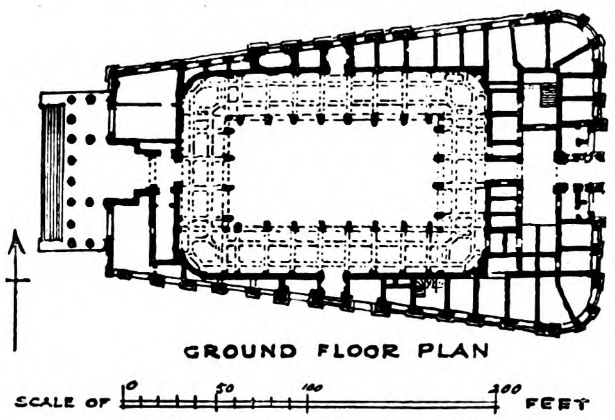


Plate II. September 1917.

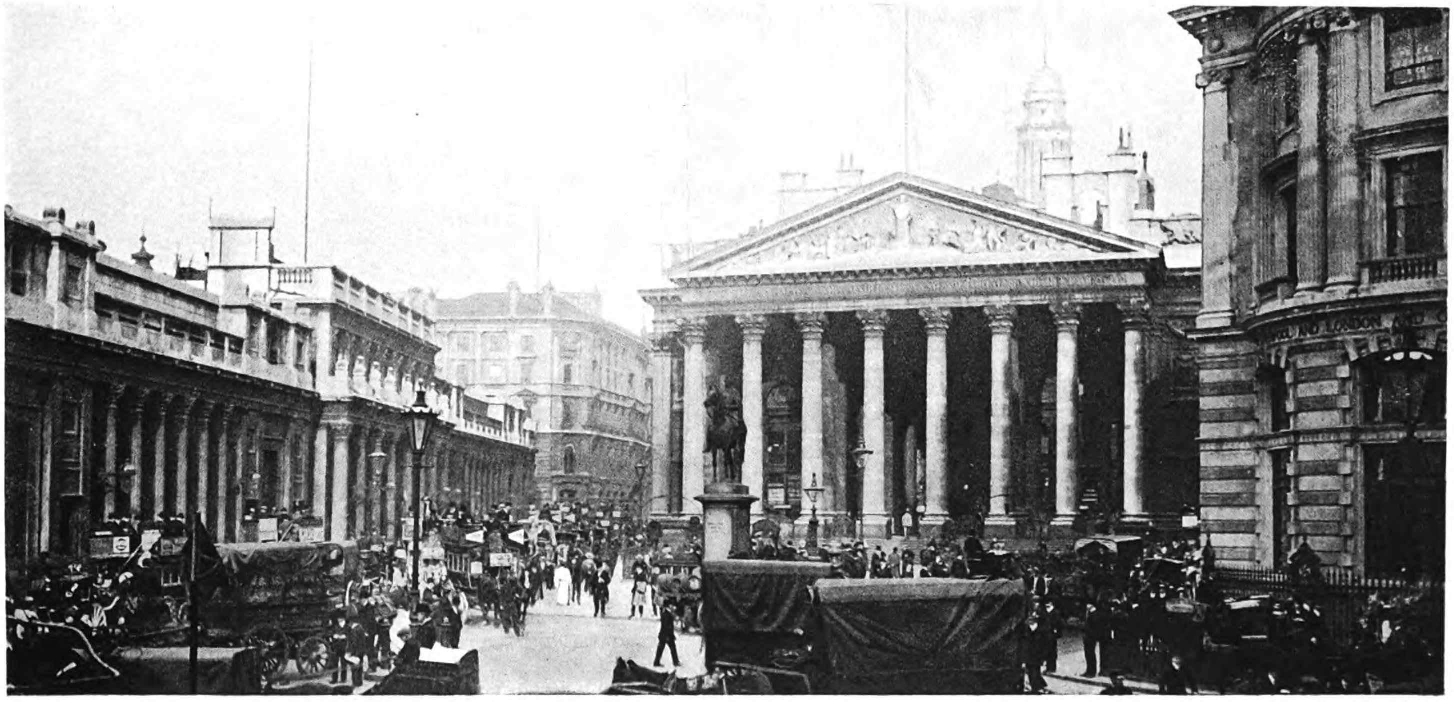
THE FRONT OF THE ROYAL EXCHANGE AS ALTERED BY GEORGE SMITH IN 1821.



PERSPECTIVE SKETCH OF COCKERELL'S COMPETITION DESIGN FOR THE NEW ROYAL EXCHANGE, AFTER THE FIRE OF 1838.



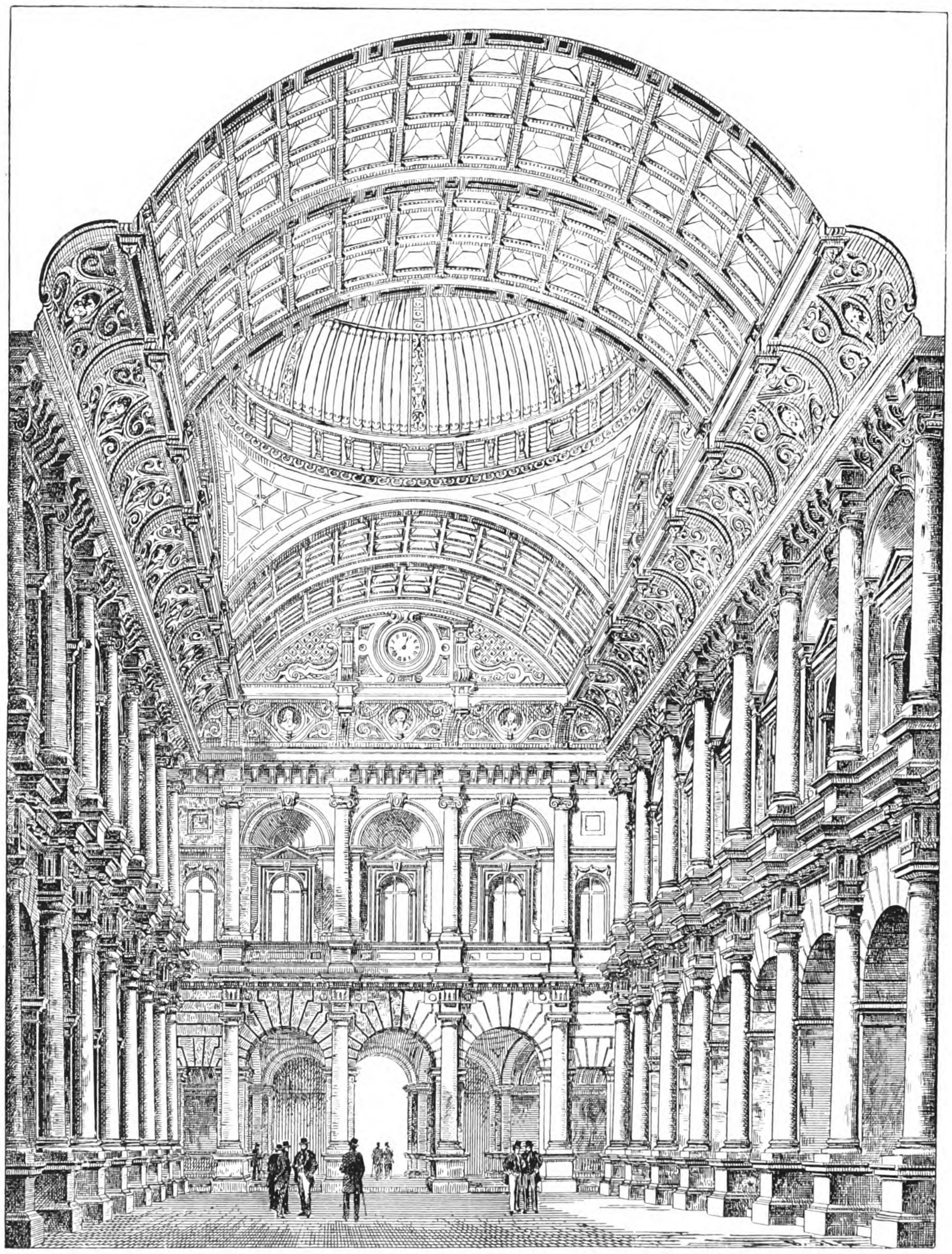
PLAN OF THE PRESENT BUILDING.
Sir William Tite, Architect.
Reproduced from Richardson's "Monumental Classic Architecture," by kind permission of Messrs. B. T. Batsford, Ltd.



THE WEST FRONT OF THE ROYAL EXCHANGE AS IT IS TO-DAY.
Sir William Tite, Architect.

Photo: Photochrom.

Opening of the Royal Exchange by H. M. Queen Victoria, 28th October, 1844," by Robert Macbeth, A.R.A.; "Nelson leaving Portsmouth, 18th May, 1803, to join H.M.S. 'Victory,'" by Andrew C. Gow, R.A.; "The Founding of the Bank of England, 27th July, 1694," by G. Harcourt; "The Great Fire of London, 1666," by Stanhope A. Forbes, A.R.A.; "Charles I. demanding the five members at the Guildhall, 1641–2," by S. J. Solomon, A.R.A.; "The Opening of the First Royal Exchange by Queen Elizabeth, 23rd January, 1570–1," by Ernest Crofts, R.A.; "The Foundation of St. Paul's School, 1509," by William F. Yeames, R.A.; "The Crown offered to Richard III at Baynard's Castle," by Sigismund Goetze; "The Reconciliation of the Skinners and Merchant Taylors Companies by Lord Mayor Billesden, 1484," by E. A. Abbey, R.A.; "Henry VI. Battle of Barnet, 1471. The trained bands marching to the support of Edward IV," by J. H. Amschewitz; "Philip the Good presenting the Charta to the Merchant Adventurers," by E. A. Cox, R.B.A.; "Sir Richard Whittington dispensing his Charities," by Henrietta Rae; "Sir Henry Picard, Master of the Vintners Company, entertaining the Kings of England, France, Scotland, Denmark, and Cyprus," by A. Chevallier Taylor; "King John sealing Magna Charta," by Ernest Normand; "William II building the Tower of London," by C. Goldsborough Anderson: "William the Conqueror granting a Charter to the Citizens of London," by J. Seymour Lucas, B.A.; "Alfred the Great repairing the Walls of the City of London," by Frank O. Salisbury; "Phœnicians Trading with the Early Britons on the Coast of Cornwall," by Sir Frederick Leighton, P.R.A. These paintings are, without exception, admirable works of art, but it is inevitable from their position that they should be badly lighted, and in no single instance can they be seen to advantage. In spite of so much endeavour the courtyard does not make instant appeal, and Thornycroft's somewhat uninspired statue of Queen Victoria, which stands in the middle, strikes one as being far too small in scale for its position. Mr. A. Bruce Joy's large bronze statue of her late Majesty, which, executed for the Government of British Columbia, is housed here until it may be safely conveyed across the sea at the end of the War, is a much more impressive and dignified conception.



PERSPECTIVE DRAWING OF THE COURTYARD OF SIR WILLIAM TITE'S ROYAL EXCHANGE, SHOWING THE EXISTING COVERING DESIGNED BY CHARLES BARRY.

Reproduced, by kind permission, from "The Builder" of 13 October 1883.

Owing to modern commercial methods, and the institution of separate Exchanges for various classes of commerce—such, for example, as the Corn, Wool, and Baltic Exchanges—the Royal Exchange as a business centre has declined considerably in importance. By its accommodation of "Lloyd's" and a number of important insurance companies, however, it still plays no mean part in the commercial life of the City; it stands as a symbol and, like the Bourse of Petrograd which Thomas de Thomon conceived on such majestic lines in the first years of the nineteenth century, or the Paris Bourse which Brongniart began and Labarre finished a few years before Tite produced his winning design, it proclaims the greatness of a capital City. These Bourses show no lack of monumental dignity, and if London's Exchange is hardly comparable with these two continental examples of outstanding merit, it certainly holds its own, from the point of view of design, with those in most capital cities, while for historical associations it is second to none in the world.

A MEDAL TO COMMEMORATE THE BATTLE OF JUTLAND.

THE accompanying illustrations show a series of designs submitted in the recent competition, held under the auspices of the Royal Numismatic Society, for a medal to commemorate the Jutland Battle. The two designs on this page were by Mr. H. Tyson Smith and Mr. E. Carter Preston in collaboration, but the two which appear on page 52 were by Mr. E. Carter Preston alone. Both artists are associated with the School of Architecture, Liverpool University.

The design of the obverse is distinct in each case, but that of the reverse varies but little; a change in the form and arrangement of its elements—the lion, the eagle, and the dolphins—being the only difference. Throughout the series, the design of the reverse has been influenced by Syracusan models. A brief description in each case may be given:

I.

Obverse.—Britannia holding a small winged figure—the classic symbol of victory. The pedestal upon which Britannia and the British Lion stand is modelled on the Roman rostra, the ships' prows commemorating a naval victory. Wreaths of victory accompany the names of Jellicoe and Beatty.

Reverse.—The British Lion overcoming the German Eagle. The Dolphins, as in Greek coins, symbolize the sea.

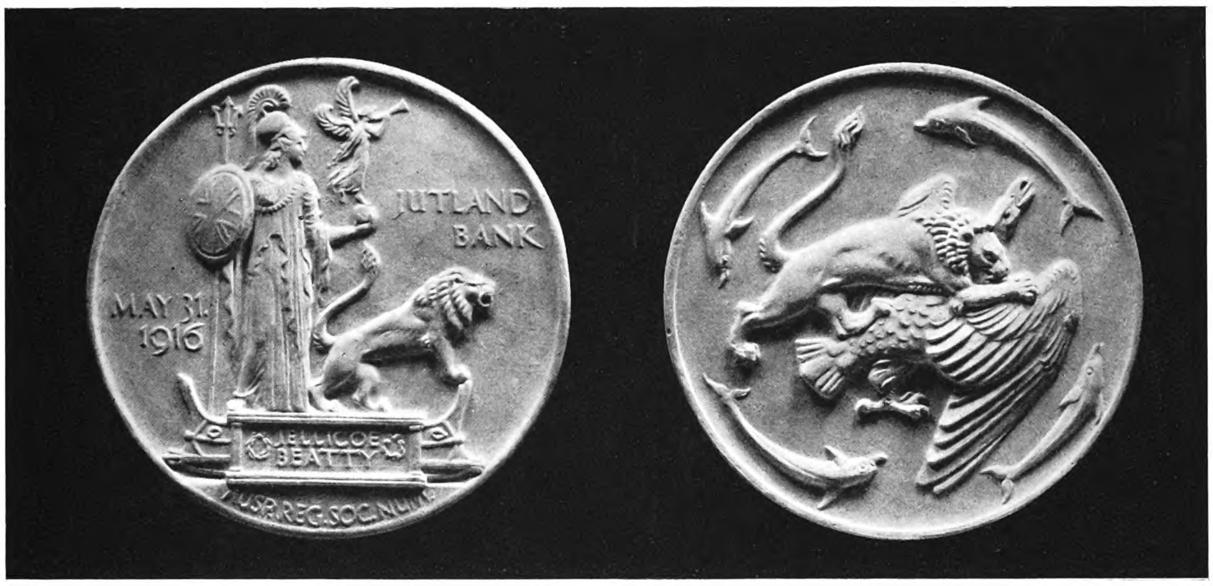
II.

This is a variation of No. I. The chief difference is in the obverse. Britannia wears a crown of laurel instead of her helmet, and the Lion appears only as a decoration on the shield.

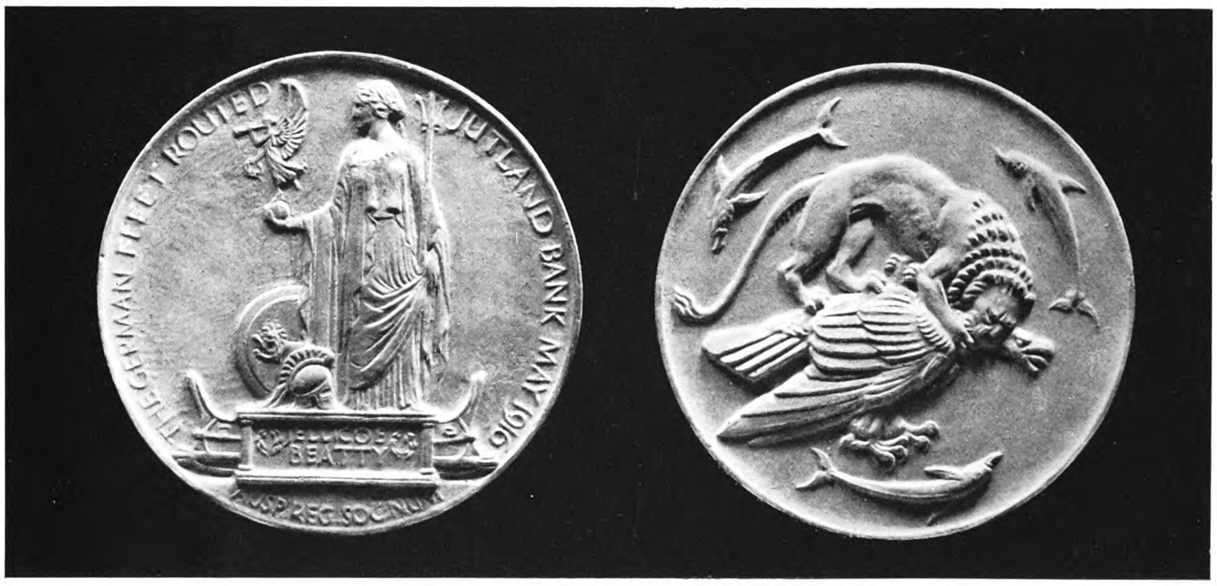
III.

Obverse.—A winged Victory, with trumpet, crowning the British Lion with a laurel wreath. The pedestal supporting the Lion is an adaptation of the fighting top above the tripod mast on H.M.S. "Iron Duke."

Reverse.—The British Lion treading upon the necks of German eagles. The convention has an Assyrian prototype.



I.



II.

DESIGNS FOR A MEDAL TO COMMEMORATE THE BATTLE OF JUTLAND.
By H. Tyson Smith and E. Carter Preston.

IV.

Obverse.—Britannia seated on a pedestal decorated with the rams of British battleships.

Reverse.—A variation of preceding examples.

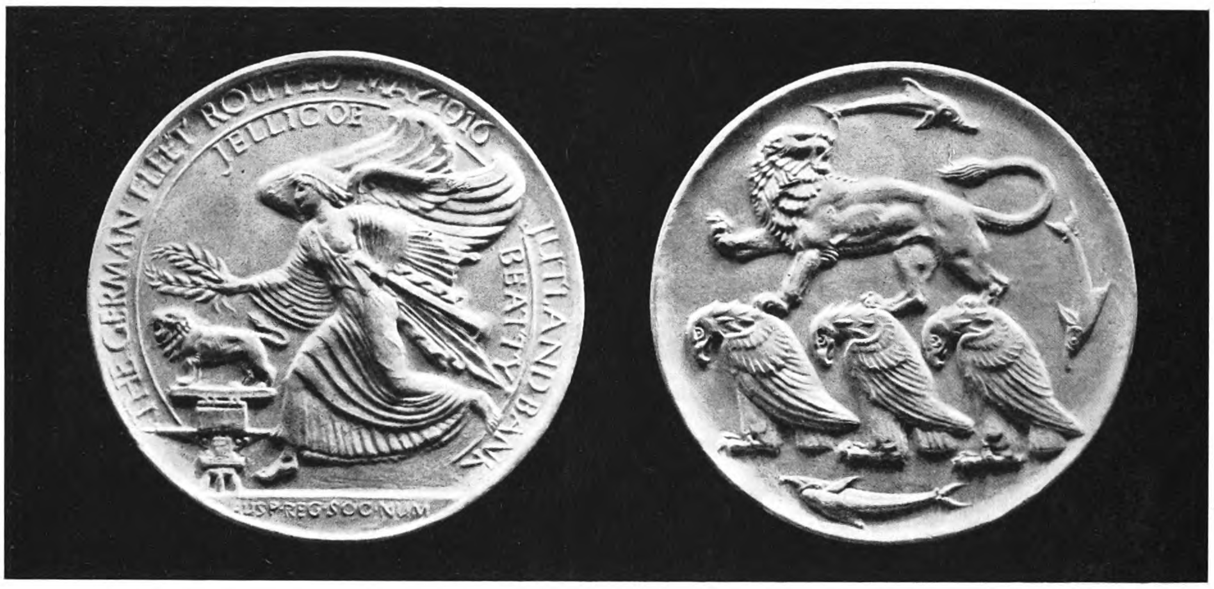
These medals are very vigorous both in design and execution. It is always difficult to fill a round space satisfactorily; but the authors of these designs have done so with marked success in every instance. The modelling is bold and strong, and in each case the reverse is invested with a fine rhythmical vigour, the victory of the British Lion over the German Eagle being conveyed in a convincing and unmistakable manner.

A WAR MEMORIAL TABLET.

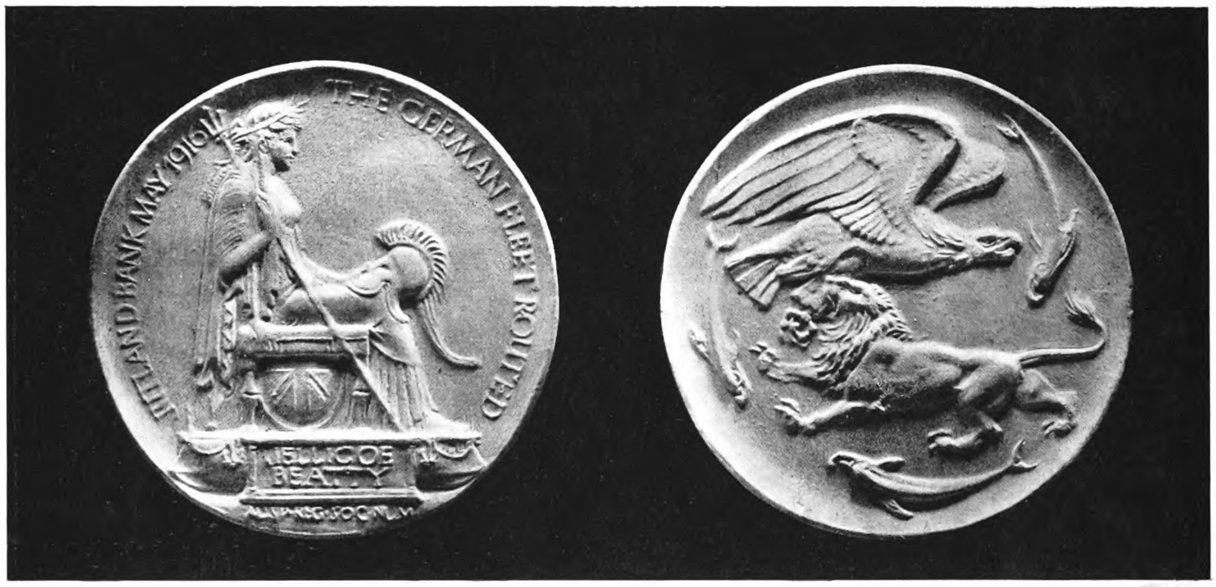
THE design of the memorial tablet comes well within the province of the architect; indeed, it is essentially an architectural subject, requiring a refined sense of proportion and composition and an intimate knowledge of architectural detail. In the past this class of work has not been done even moderately well, as witness the walls of the average church, whereon these memorial tablets are mostly to be found. It is to be feared that architects, either from a lack of opportunity or from a disinclination to give their attention to such small and not very remunerative work, have been prone to neglect the memorial tablet, and the consequences are obvious.

It is very refreshing, therefore, to encounter such an excellent piece of work as that which is illustrated on the opposite page. This tablet, designed by Mr. Lionel B. Budden, M.A., A.R.I.B.A., and executed by Mr. H. Tyson Smith, has been erected in the parish church of Arrochar, Loch Lomond. It consists of a brass plate, 2 ft. 11 in. by 1 ft. 10 in., mounted on a slab of green Purbeck marble. The enrichment is cut, not modelled, except in the case of the Cameron badge, which was modelled and cast. The handsome Roman lettering employed is based on that which is used in the inscription at the base of the column of Trajan.

At a time when small memorial tablets are being erected in large numbers all over the country, the present admirable example forms an appropriate reminder of the artistic possibilities of this somewhat neglected class of work. If such a high standard of achievement is generally maintained, we shall have no cause for complaint.


THE GERMAN FLEET ROUTED MAY 1916
JELLICOE
JUTLAND BANK
BEATTY

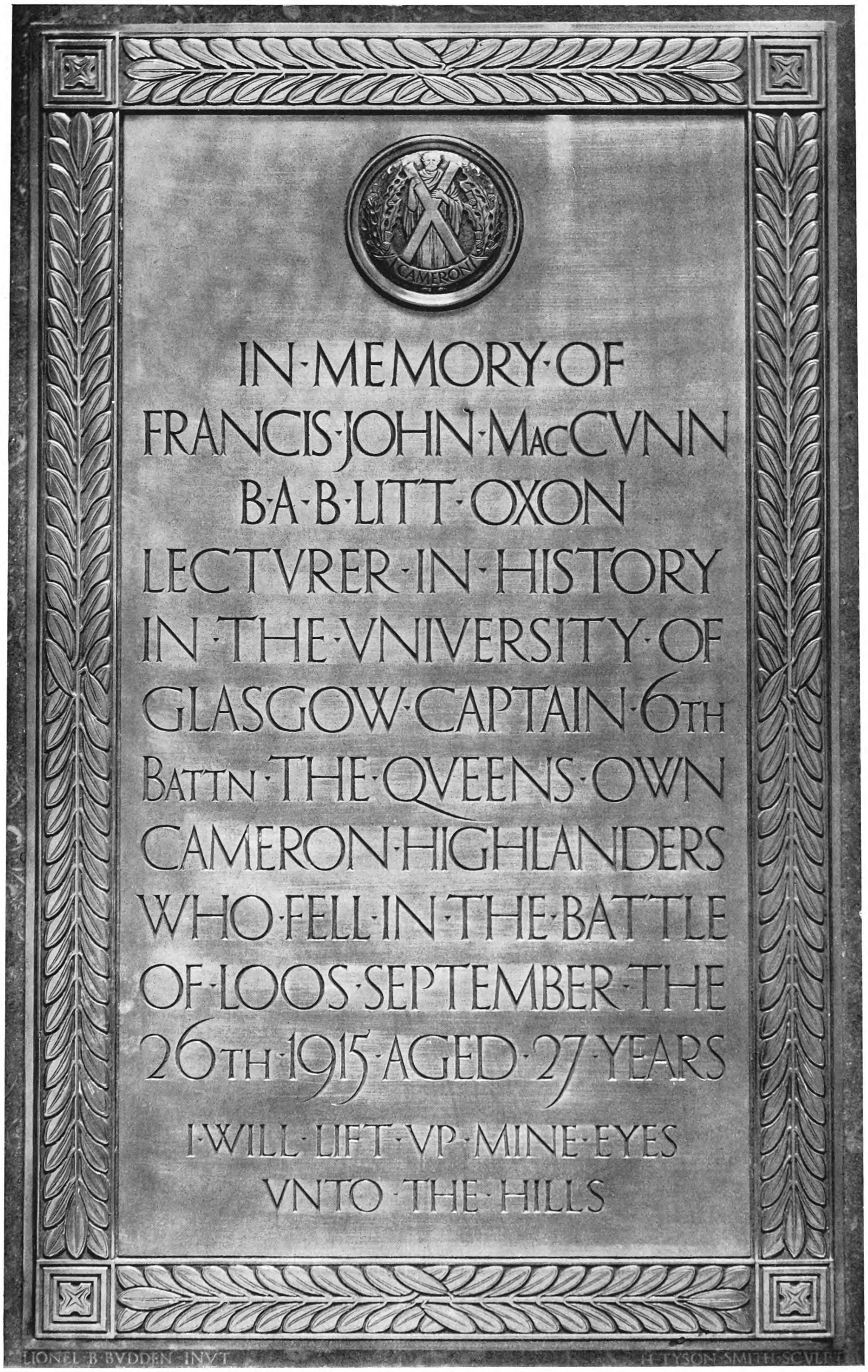
III.



IV.

DESIGNS FOR A MEDAL TO COMMEMORATE THE BATTLE OF JUTLAND.

By E. Carter Preston.



MEMORIAL TABLET IN THE PARISH CHURCH OF ARROCHAR, LOCH LOMOND, SCOTLAND.

Lionel B. Budden, M.A., A.R.I.B.A., Architect. H. Tyson Smith, Sculptor.

COMPLETION OF THE NEW GOVERNMENT BUILDINGS, WESTMINSTER.

IT was so long ago as 1898 that the late John M. Brydon was appointed by the Government to design and carry out a great new block of public buildings in Westminster. Three years later, in 1901, he died, leaving his work barely risen above the level of the ground. Since then Sir Henry Tanner, Principal Architect to H.M. Office of Works, has been in charge, and under his able direction the work has now been brought to a successful completion.

The first portion was finished in 1908, and consisted of the front to Parliament Street, part of the front to Great George Street, the whole front to Charles Street, and more than half of the great circular courtyard. An illustrated article dealing with this part of the work was published in THE ARCHITECTURAL REVIEW for August 1908. Before further progress could be made, the old premises of the Institution of Civil Engineers and a number of other buildings on the site had to be acquired and demolished. This work accomplished, building operations have since proceeded steadily, if somewhat slowly; and now, after the lapse of a total period of nineteen years, Brydon's great conception is completely realized. The suggestion that considerable changes and variations have been made from the original design has no foundation in fact; so far as the architecture is concerned, Brydon's design has been carefully and faithfully carried out.

The buildings occupy an important island site about five acres in extent, bounded on the east by Parliament Street, on the south by Great George Street, on the north by Charles Street, and on the west by St. James's Park. The plan is rectangular in shape, with its two short sides to Parliament Street and St. James's Park. The planning is direct and simple in its parts, the central feature being a magnificent circular courtyard 160 ft. in diameter, on either side of which is a large square court, this in turn being flanked by four complementary and subsidiary courts or light-wells—two on either side. Thus all rooms and most of the corridors have an abundance of natural light.

The principal entrance is in Whitehall, but there are secondary entrances on all fronts. Access to the circular court is gained from Great George Street and from Charles Street by three arches, the middle one being for vehicles.

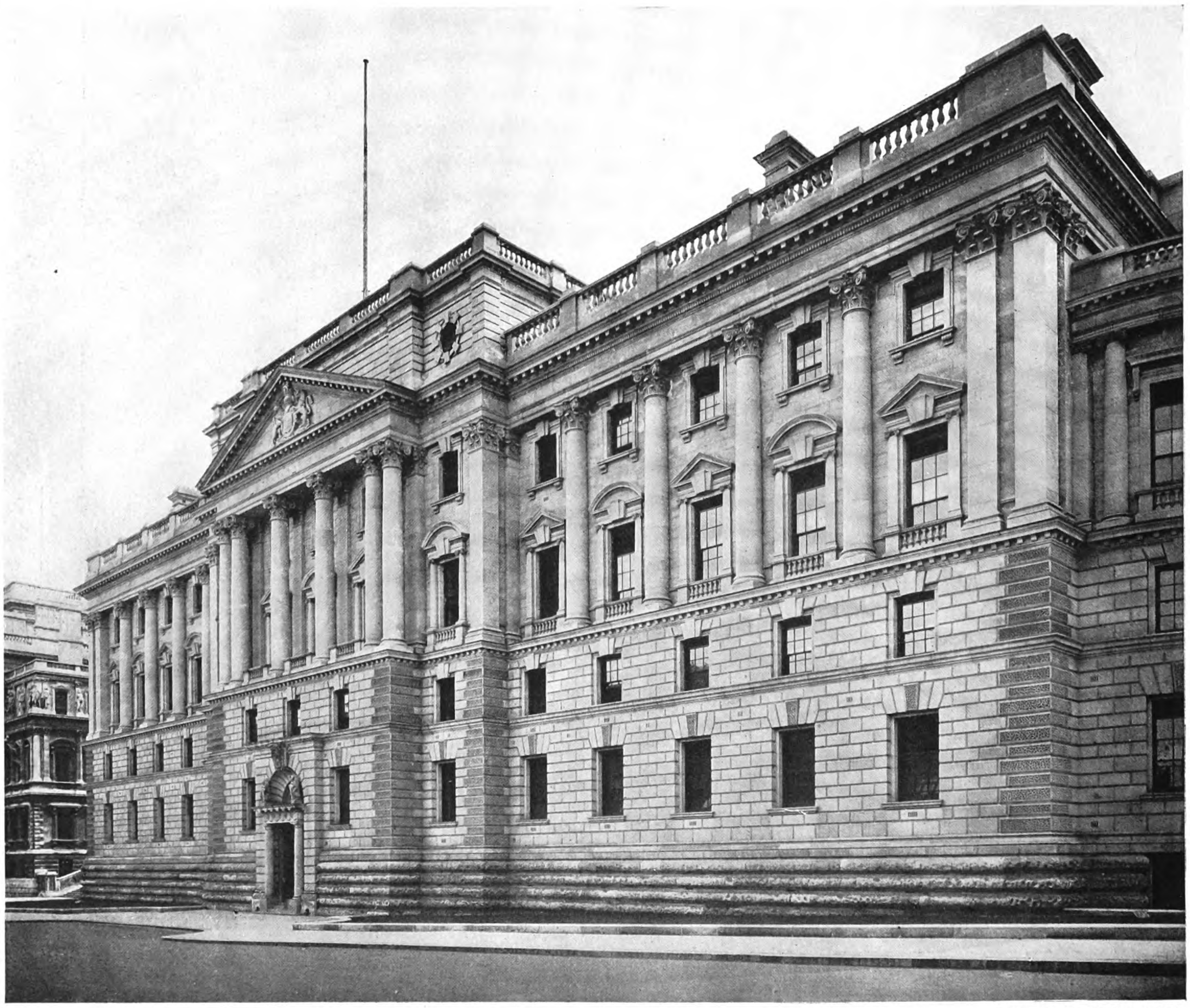


Photo: John H. Avery & Co.

ELEVATION TO ST. JAMES'S PARK.

These arches are fitted with some fine wrought-iron and bronze gates.

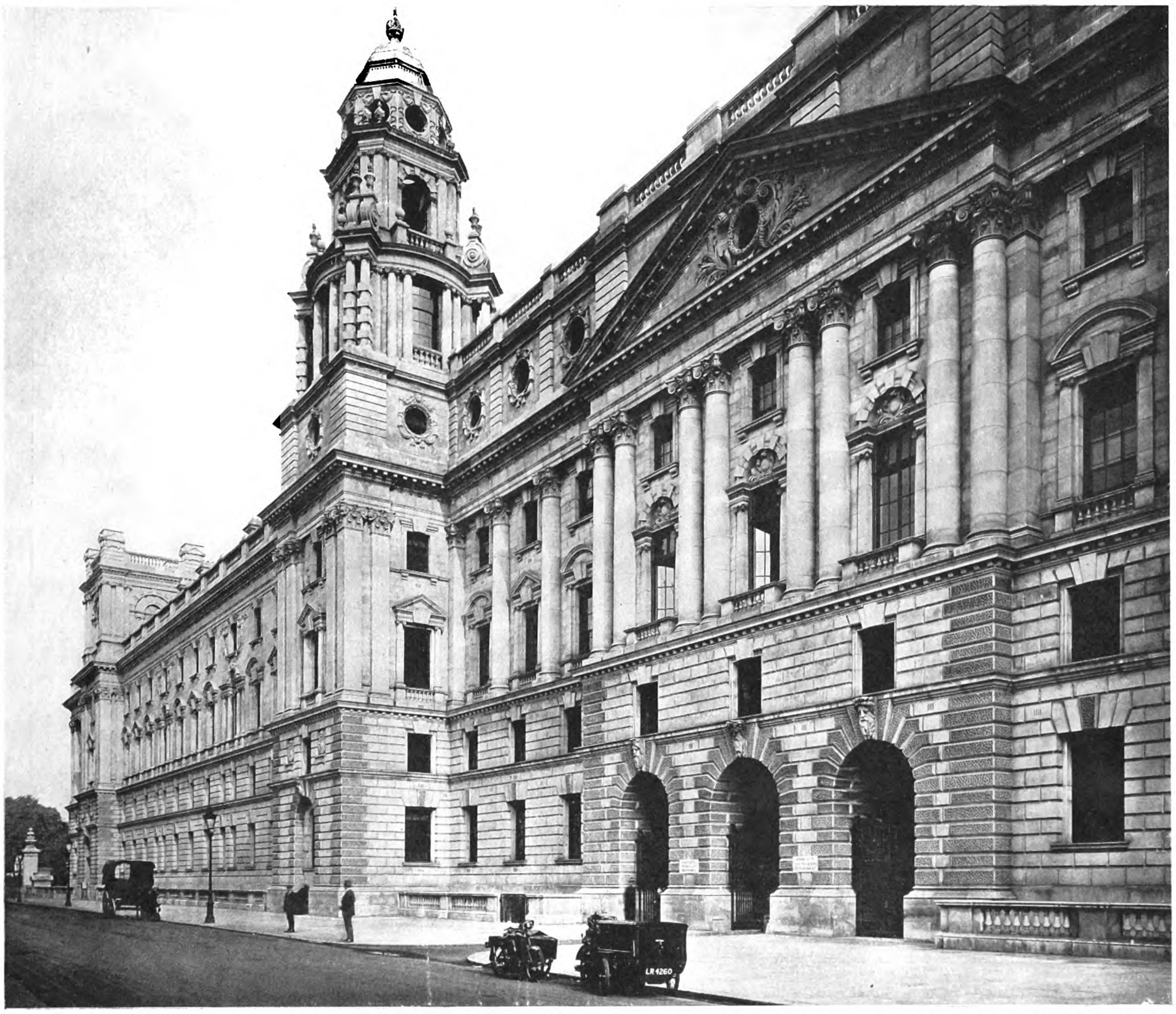
These great buildings are easily the largest and most important that have been carried out for the Government in modern times. That Brydon secured the commission was due to the reputation which he had achieved by his work at Bath, a city in which he began activities about ten years before his death. At that time, as a writer of distinction has observed, taste was literally dead. In fact, a kind of opposition to good work had sprung up. Brydon's strict views on art seem to have kept him in comparative obscurity for a time. There was no room, apparently, for an artist who had studied Inigo Jones's Whitehall designs and had analysed the composition of Wren's City churches. Brydon found his opportunity, however, in the competition for additions to Thomas Baldwin's municipal buildings at Bath. This he won, thereby establishing himself firmly as one of the most competent architects of his day.

He erected other buildings in Bath, notably the Concert Room, the Technical Schools, and the Picture Gallery; and in these buildings we may trace the origin of much that is to be found in his later and greater work at Westminster.

The new Government building at Westminster, of which, now that it is completed, we are able to form a fair judgment, may, on the whole, be pronounced a success. It is by no means a brilliant work, but it possesses considerable dignity, as becomes a building devoted to the service of the State. It is a good typical example of modern English Renaissance based on the work of Inigo Jones and Wren. We may find fault with some of the detail—the unduly obtrusive keystones, the plethora of small pediments, the bulky and unnecessary swags which drape some of the windows, the finical character of much of the decorative detail; but when due allowance is made for all this, for the superfluous towers themselves even, the building still remains an achievement of considerable architectural merit.

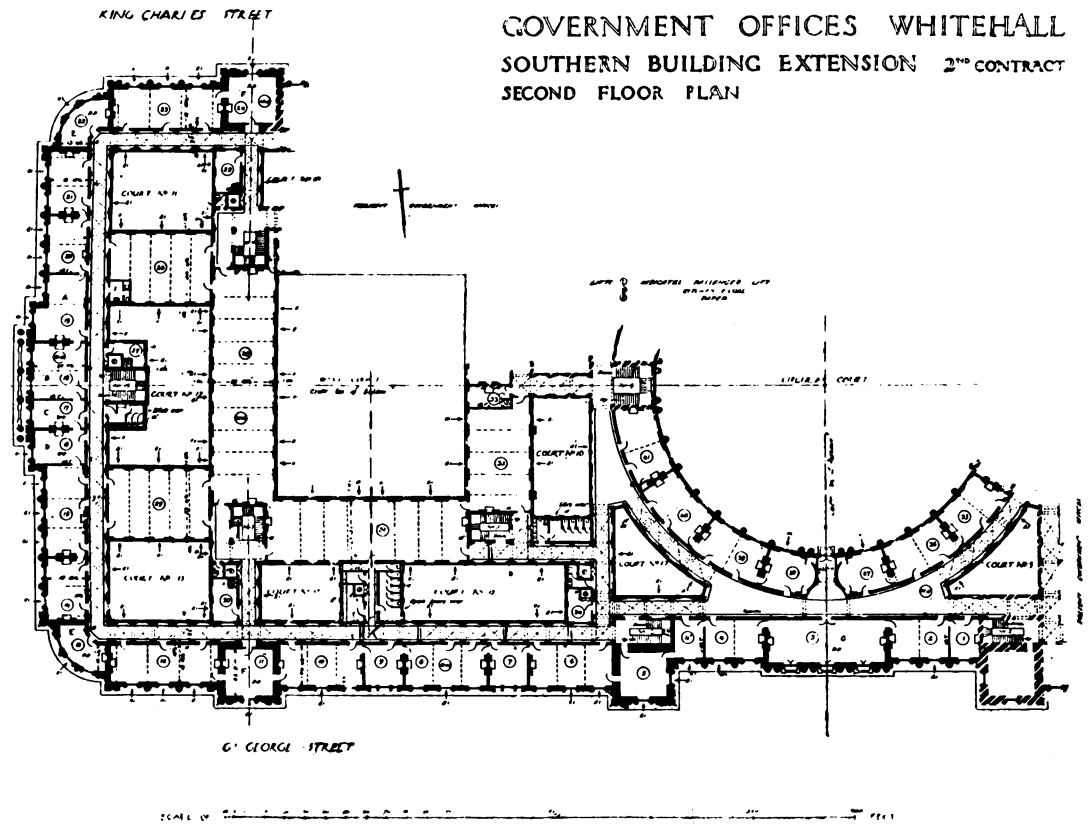
The west front, that facing towards St. James's Park, is the most satisfactory of all. It possesses a dignity which is not to be found in any of the other elevations. It is more or less a repetition of the Parliament Street façade, but without the end pavilions and towers, the urns that crown the attic story, and the decorative panels between the second-floor windows. All these features have been omitted with considerable gain to architectural effect. The curved angles at the north-west and south-west corners of the building (see Plate IV) are oddly reminiscent of the Technical Schools and the Picture Gallery at Bath. They are admirable enough in themselves when considered apart, but their difference in scale from the rest of the composition is rather too obvious to be altogether attractive.

Internally the new part of the building has very little of architectural interest. There are three rather fine staircase halls, that on the St. James's Park front being illustrated on

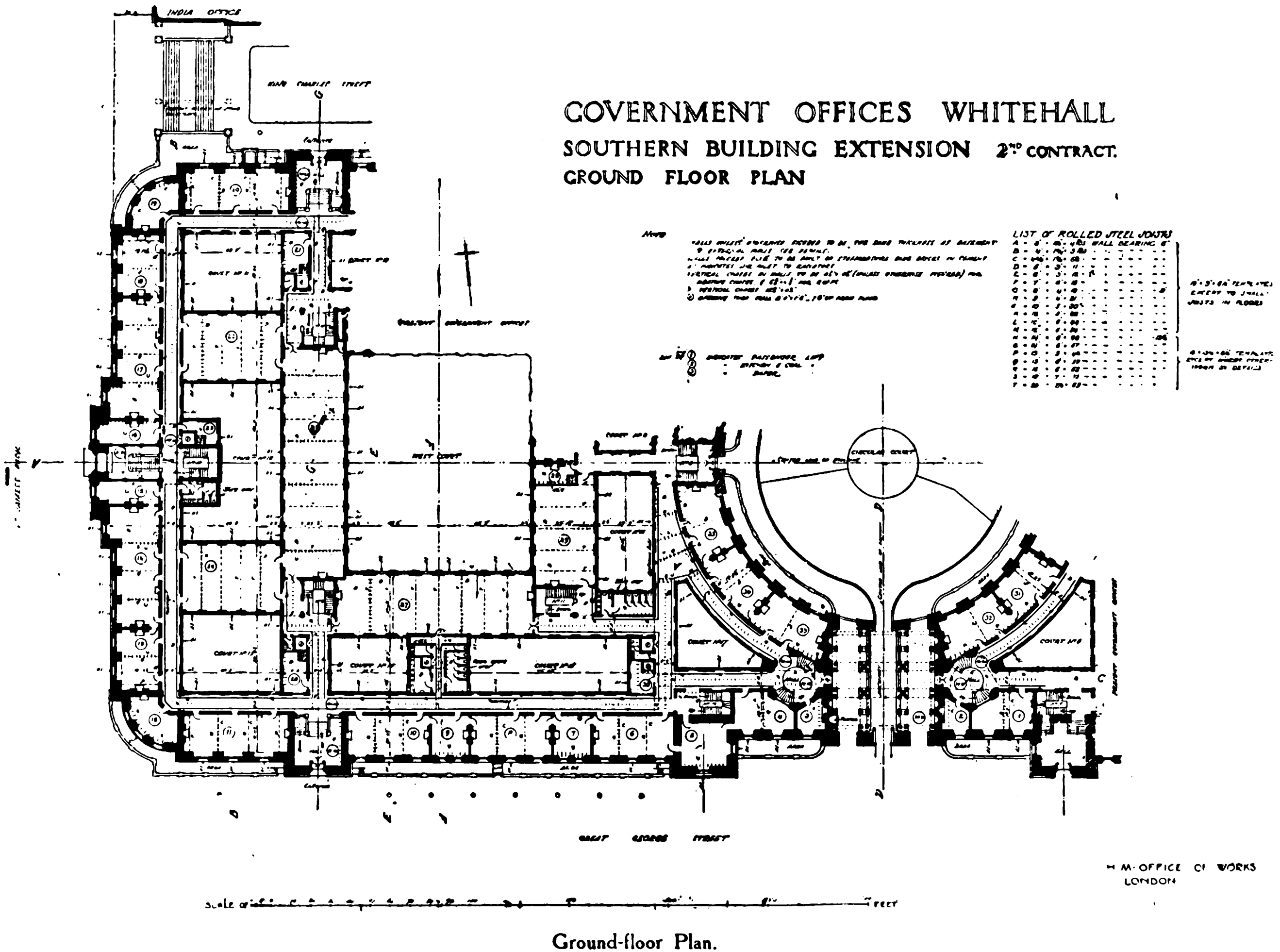


ELEVATION TO GREAT GEORGE STREET.

Photo: John H. Avery & Co.


KING CHARLES STREET
GOVERNMENT OFFICES WHITEHALL
SOUTHERN BUILDING EXTENSION 2ND CONTRACT
SECOND FLOOR PLAN
GT GEORGE STREET
SCALE OF FEET

Second-floor Plan.


INDIA OFFICE
KING CHARLES STREET
GOVERNMENT OFFICES WHITEHALL
SOUTHERN BUILDING EXTENSION 2ND CONTRACT.
GROUND FLOOR PLAN
LIST OF ROLLED STEEL JOISTS
CIRCULAR COURT
GREAT GEORGE STREET
H.M. OFFICE OF WORKS LONDON
SCALE OF FEET

Ground-floor Plan.

COMPLETION OF THE NEW GOVERNMENT BUILDINGS, WESTMINSTER.
Designed by the late John M. Brydon, F.R.I.B.A., and completed by Sir Henry Tanner, I.S.O., F.R.I.B.A.

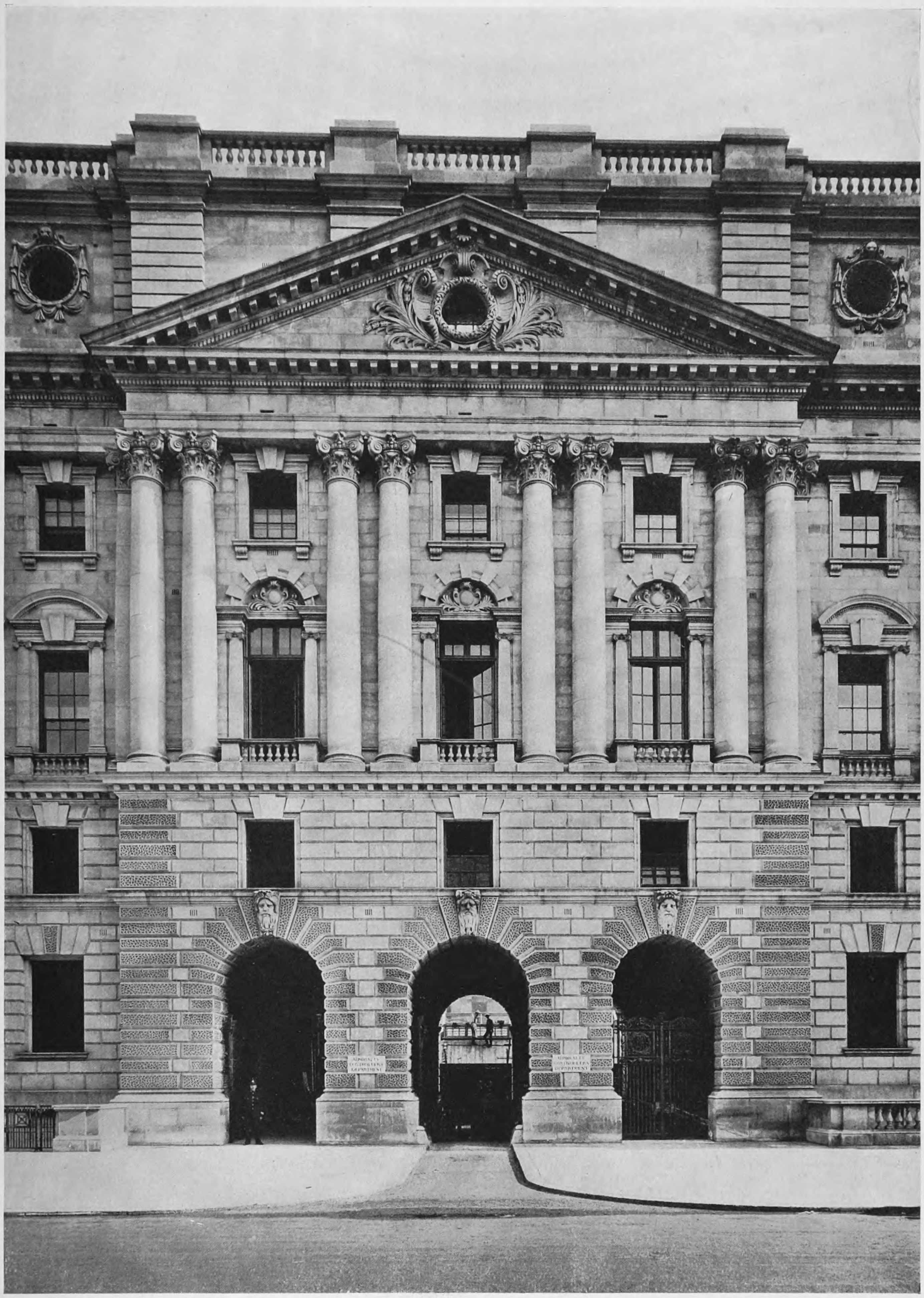


Plate III. September 1917. Photo: John H. Avery & Co.

COMPLETION OF THE NEW GOVERNMENT BUILDINGS, WESTMINSTER: DETAIL OF ELEVATION TO GREAT GEORGE STREET.

Designed by the late John M. Brydon, F.R.I.B.A., and completed by Sir Henry Tanner, I.S.O., F.R.I.B.A.

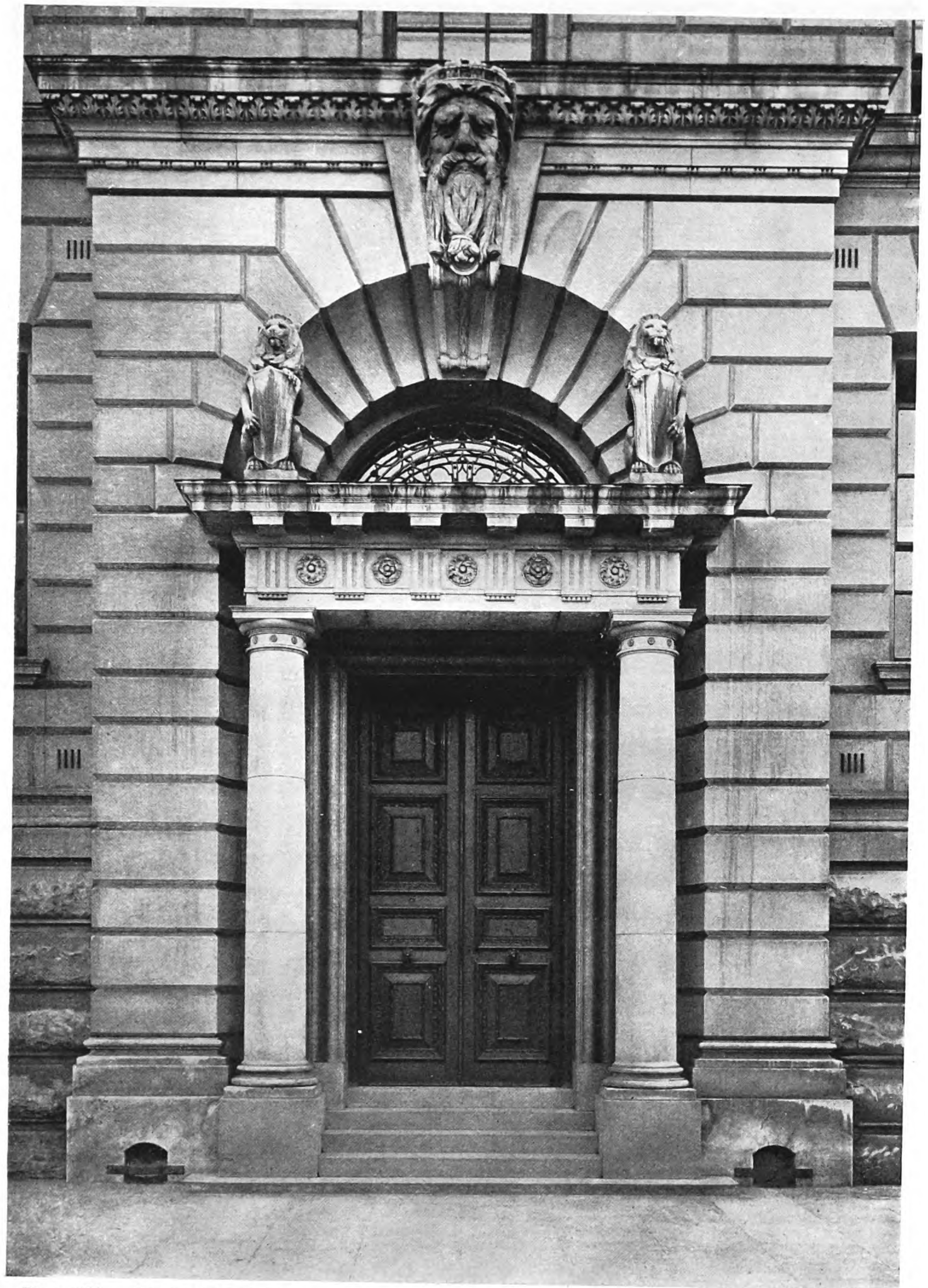
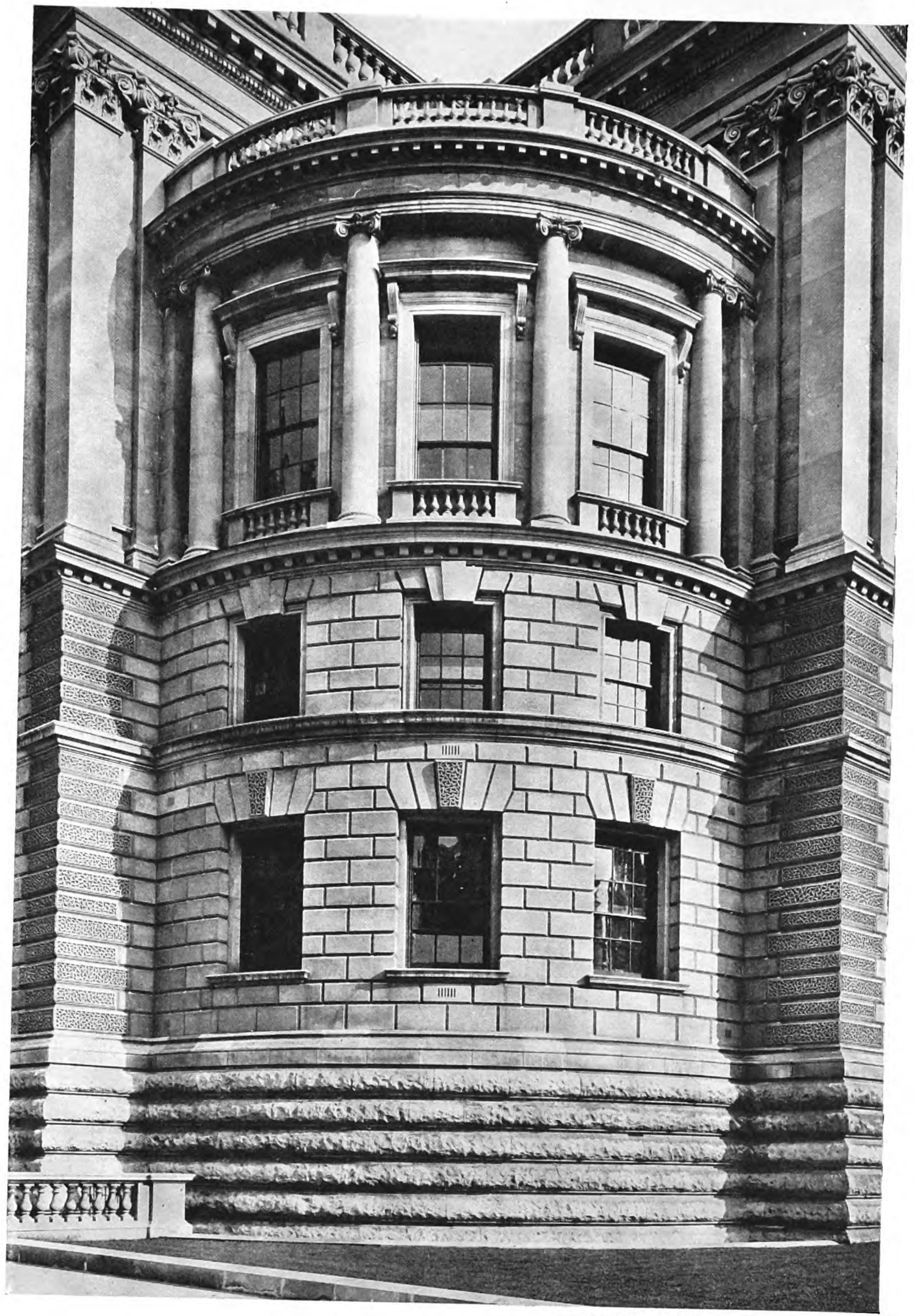


Plate IV. September 1917

Detail of Entrance on Front to St. James's Park.



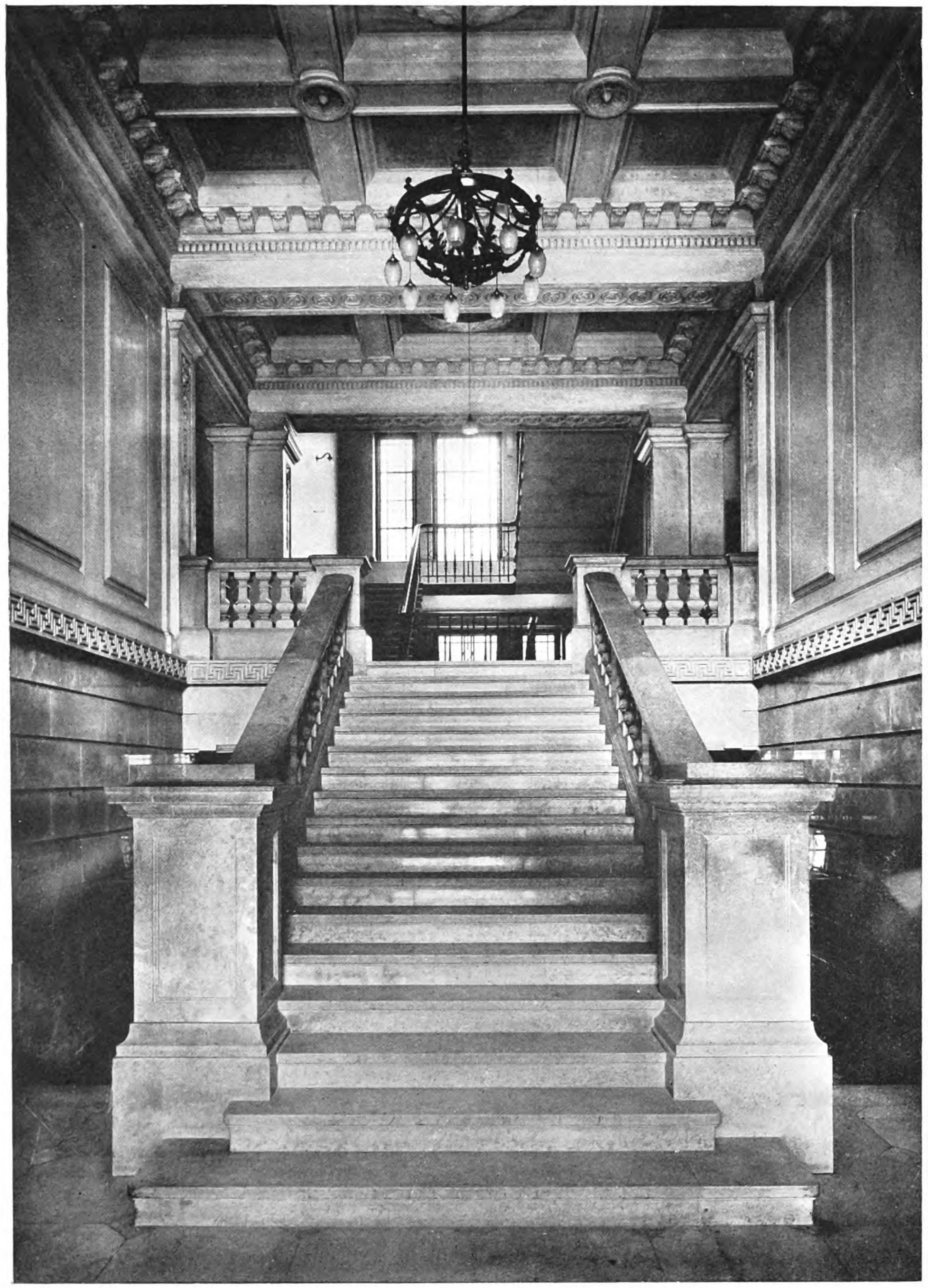
Photos: John H. Avery & Co.

Detail of North-west Angle facing St. James's Park.

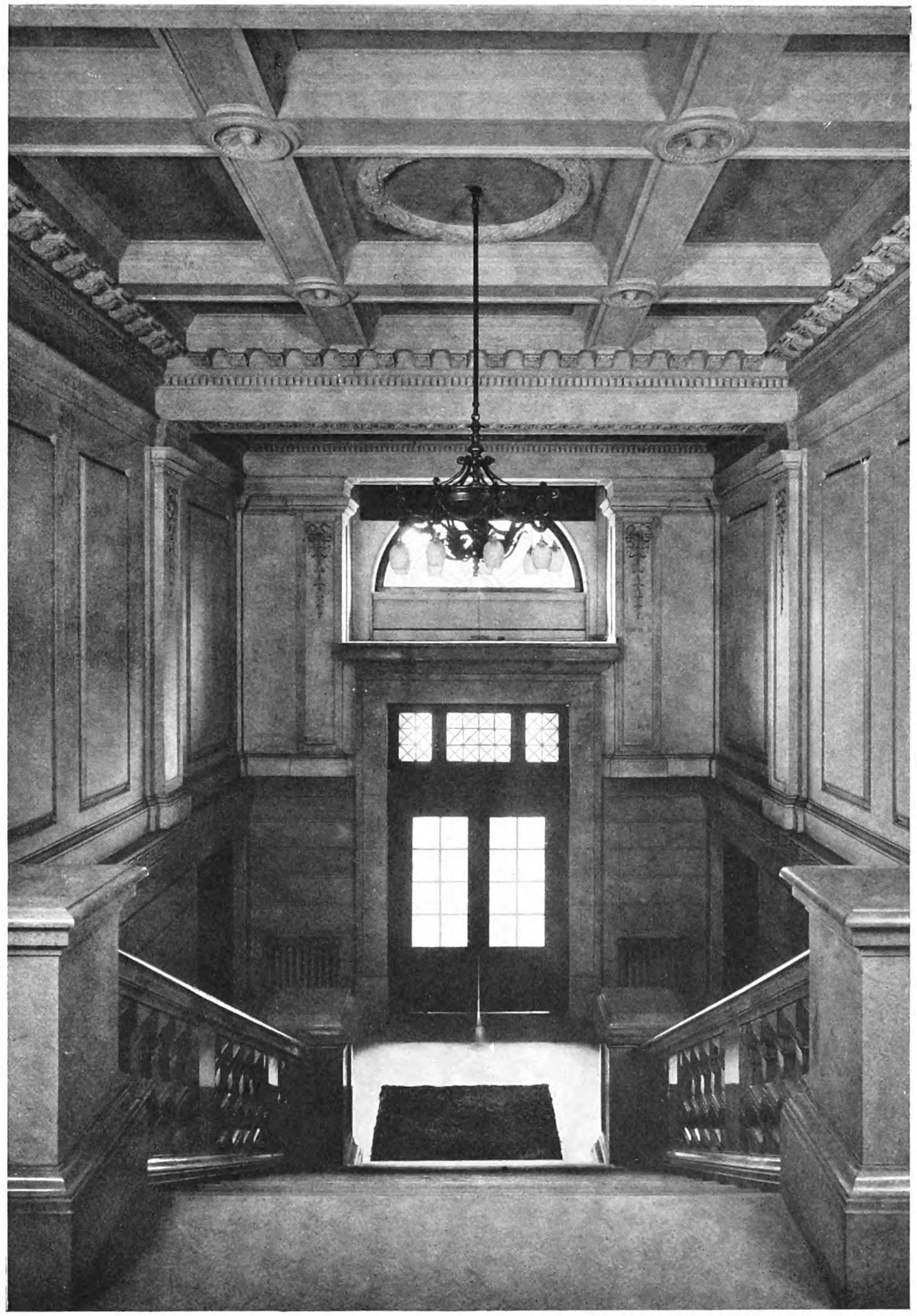
COMPLETION OF THE NEW GOVERNMENT BUILDINGS, WESTMINSTER.

Designed by the late John M. Brydon, F.R.I.B.A., and completed by Sir Henry Tanner, I.S.O., F.R.I.B.A.

Plate V. September 1917.



Staircase to St. James's Park Entrance, looking up.



Photos: John H. Avery & Co.

Staircase to St. James's Park Entrance, looking down.

COMPLETION OF THE NEW GOVERNMENT BUILDINGS, WESTMINSTER.

Designed by the late John M. Brydon, F.R.I.B.A., and completed by Sir Henry Tanner, I.S.O., F.R.I.B.A.

Plate V. The corridor shown below runs at the top of this staircase, and is generally typical of the corridor treatment on the second floor, which is the principal floor throughout the building.

Mr. E. J. Searchfield acted as clerk of the works from 1903 to the completion of the building. Mr. W. S. Frith executed some of the stone carving.

The building is constructed of brick faced with Portland stone, the floors being of ordinary concrete reinforced with rolled-steel joists. Reinforced concrete is used in the foundations and vaults, and in the retaining wall which runs the whole length of Great George Street. The light-wells are faced with white glazed bricks with stone dressings. There is a sub-ground level covered with asphalt flats and steel lanterns. The roofs are flat and covered with asphalt. All this asphalt work was executed by Messrs. The Limmer and Trinidad Lake Asphalt Co., Ltd., of London.

Messrs. Holloway Bros., Ltd., of London, were the general contractors for the superstructure, and they are to be congratulated on having carried through this important work to so successful a conclusion. The foundations were put in by Mr. F. G. Minter, of Putney, who also carried out the reinforced concrete work on the Kahn system, Messrs. The Trussed Concrete Steel Co., Ltd., of London, having supplied detailed drawings for this purpose. Work was executed by other sub-contractors as follows: Messrs. John Daymond and Son, of London (stone carving); Messrs. H. H. Martyn & Co., of Cheltenham (wood carving and plaster modelling); Messrs. H. J. Cash & Co., Ltd., of London (heating and hot-water supply installation, and fire and steam mains); Messrs. The Leeds Fireclay Co., Ltd., of Wortley, Leeds (glazed brickwork); Messrs. The Alpha Manufacturing Co., of Balham, S.W. (electric wiring); Messrs. W. Bainbridge Reynolds, Ltd., of London, and Messrs. George Wragge, Ltd., of Manchester (iron gates); Messrs. Waygood-Otis, Ltd., of London (lifts and cranes); Messrs. John Tann, Ltd., of London (strong-room doors).

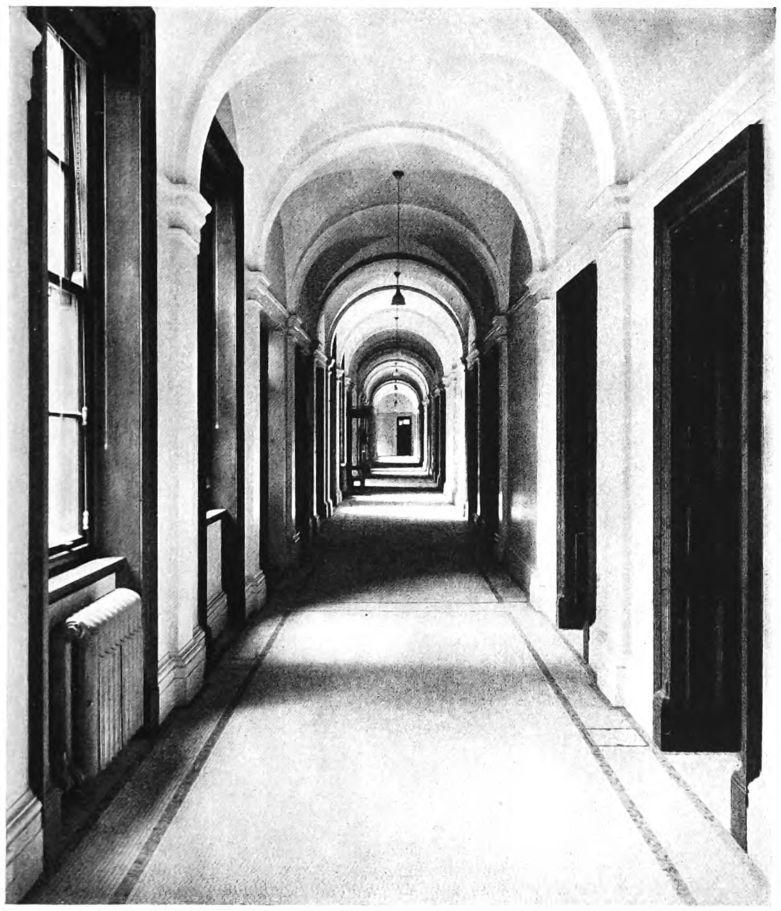


Photo: John H. Avery & Co.

NEW GOVERNMENT BUILDINGS, WESTMINSTER: CORRIDOR ON SECOND FLOOR.

Other sub-contractors were: Messrs. Dorman Long & Co., Ltd., Messrs. The Bath and Portland Stone Firms, Ltd., Messrs. Carter & Co., Ltd., Messrs. Roberts Adlard & Co., Messrs. Diespeker & Co., Ltd., Messrs. The Bromsgrove Guild, Messrs. Perry & Co., Ltd., Messrs. George Forrest and Son, Messrs. James Gibbons, Messrs. Aldous and Campbell, Ltd., Messrs. Medway's Safety Lift Co., Messrs. The Brightside Engineering Co., Ltd., Messrs. R. and A. Main, Ltd., Messrs. Geo. Rome & Co.

THE CHARING CROSS BRIDGE PROBLEM.

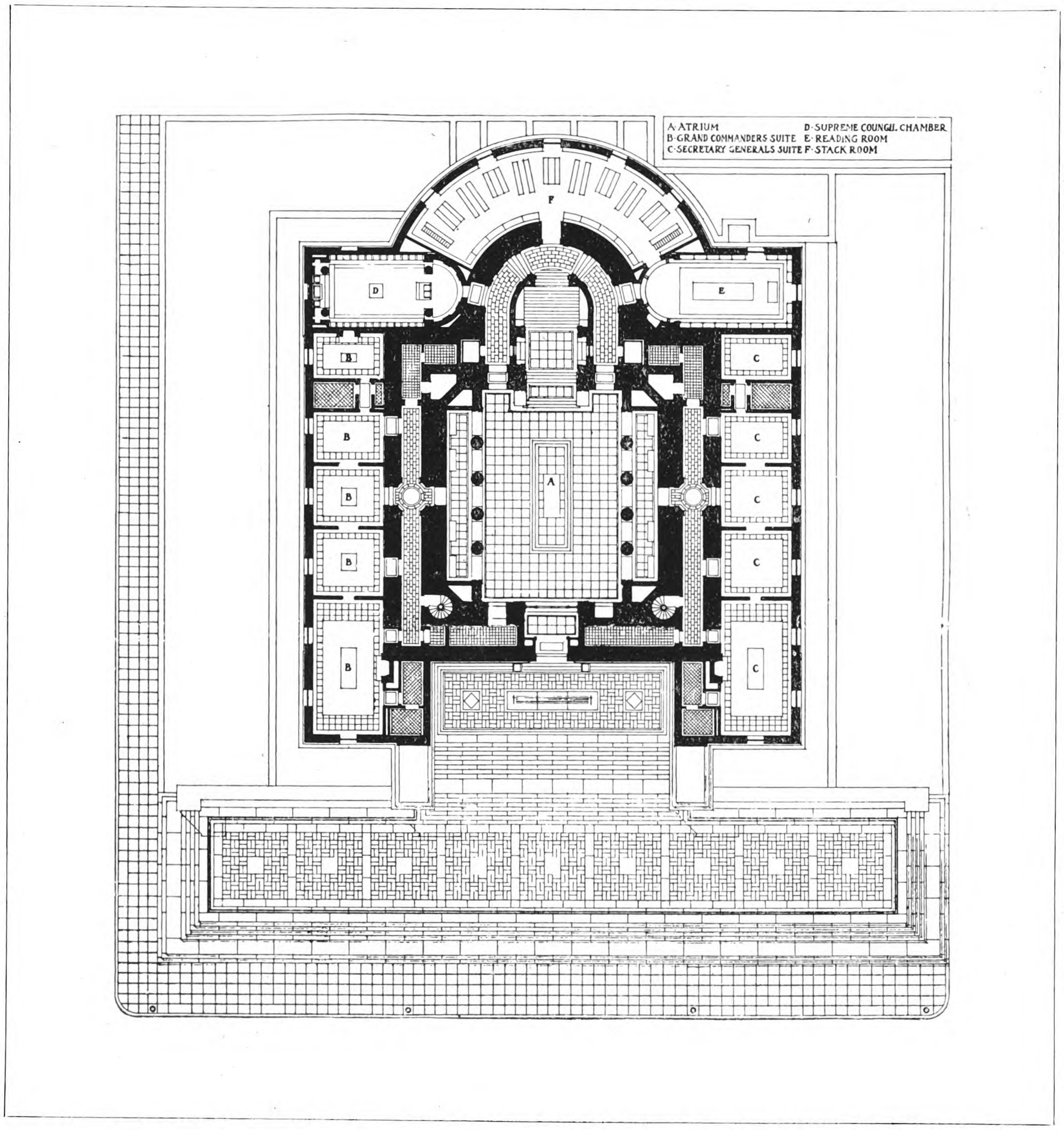
In the course of his most interesting lecture on London bridges at a recent meeting of the London Society, Mr. W. D. Caröe, M.A., F.S.A., F.R.I.B.A., dwelt at some length upon the problem created by the Charing Cross Railway Bridge, which he described as Behemoth itself. Of Brunel's Hungerford Bridge, its predecessor, the brick piers up to the railway platform are still doing service in the Thames, while the chains are spanning the Avon at Bristol, where Brunel had won a competition in 1829 for a chain bridge he was never to see erected.

Those who want to know anything about Behemoth, he continued, will find all details set down in a reprint from the proceedings of the Royal Institute of Civil Engineers, by Harrison Hayter, to which I must refer you. But remember that Behemoth single was bad enough, but Behemoth doubled is almost doubly disfiguring. Apart from the intrinsic ungainliness of the erection, I quarrel with it because, owing to its so prominent position at the river bend, it obtrudes on all sides. It exasperates by its effective obstruction. It obstructs the prospect of Waterloo Bridge and Somerset House from Westminster, and the prospect of Westminster from Waterloo Bridge. Whichever way of approach, focusing that best of all our river sweeps, far-famed by Wordsworth, there it blocks the outlook.

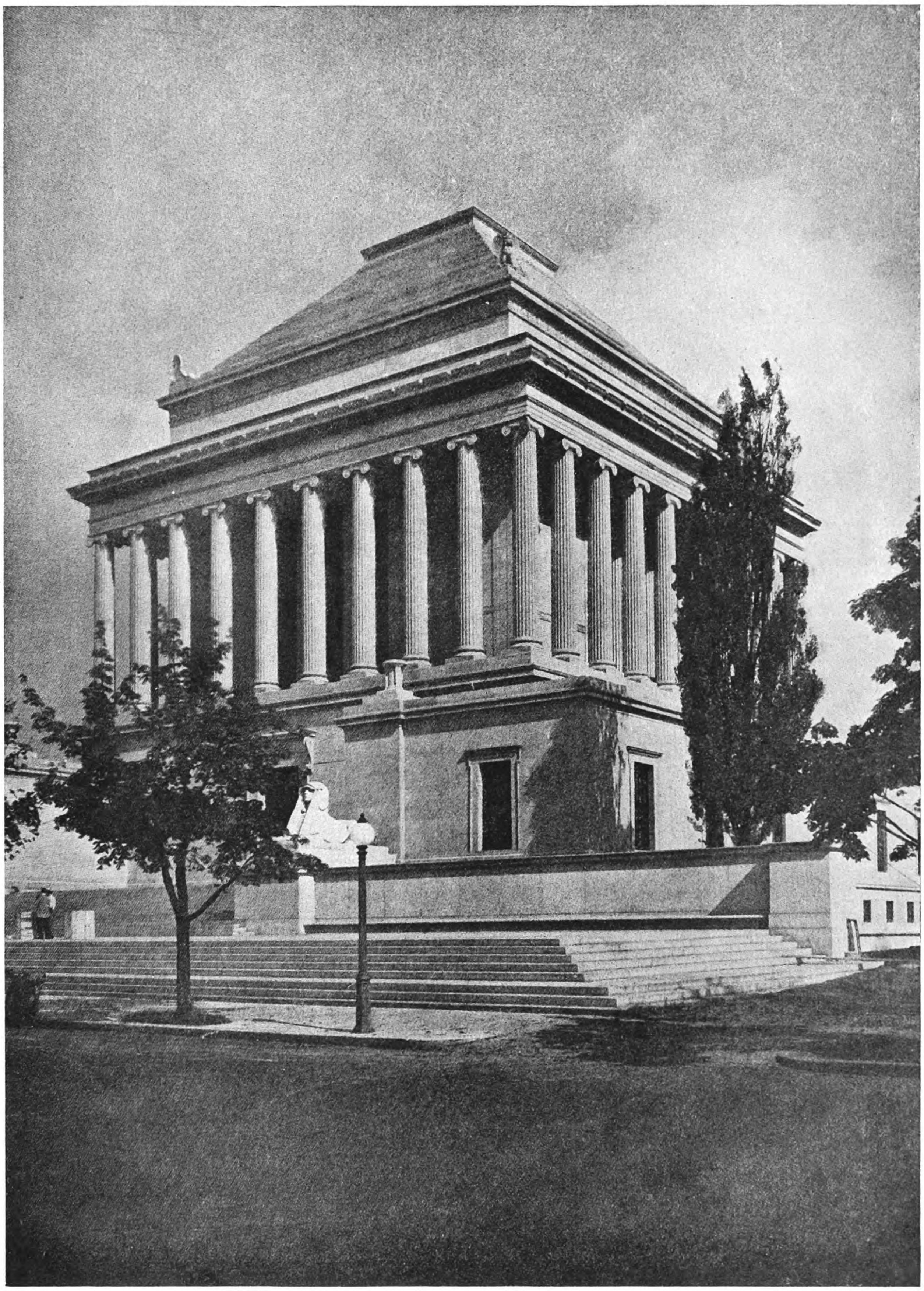
Into the recent controversy there is no need for me to enter. It is fresh in your minds. I am optimistic enough still to trust sufficiently to the good sense of our people to believe that in five or six years' time the knell of the monster will be sounded, and a great road bridge projected to take its place. It seems perhaps strange that Kent should claim what Surrey has never asked for. Indeed, the quite secondary position taken by the South Western Railway in this matter has always been to me inexplicable. But use and custom are such that it is much easier to withhold than to withdraw. If suburban Kent had never had the facilities of Charing Cross, suburban Kent would never have missed them; but, having tasted of the apple, the knowledge is there; and the greatest opposition must be expected from men of Kent and Kentish men, who had better be appeased, and can be by even greater facilities than they already have. They have a name for obstinacy and pertinacity. Why not then seize the chance for through railway connexion, from South Western as well as South Eastern, to all the northern stations from Paddington to King's Cross? I am thus the strongest advocate of an underground station at Charing Cross which will deal with South Western as well as South Eastern through suburban traffic, without passengers changing. It is the Pennsylvania of New York once more. What New York has done in much more difficult circumstances, we also can do. Such a new Charing Cross Station would be much more satisfactory than the present, for it would be in immediate contact with the Metropolitan, the District, Bakerloo, Hampstead, and Highgate Railways, as well as with the Embankment trams and the Strand omnibuses, and it would form no block to the traffic.

THE TEMPLE OF THE SCOTTISH RITE, WASHINGTON.

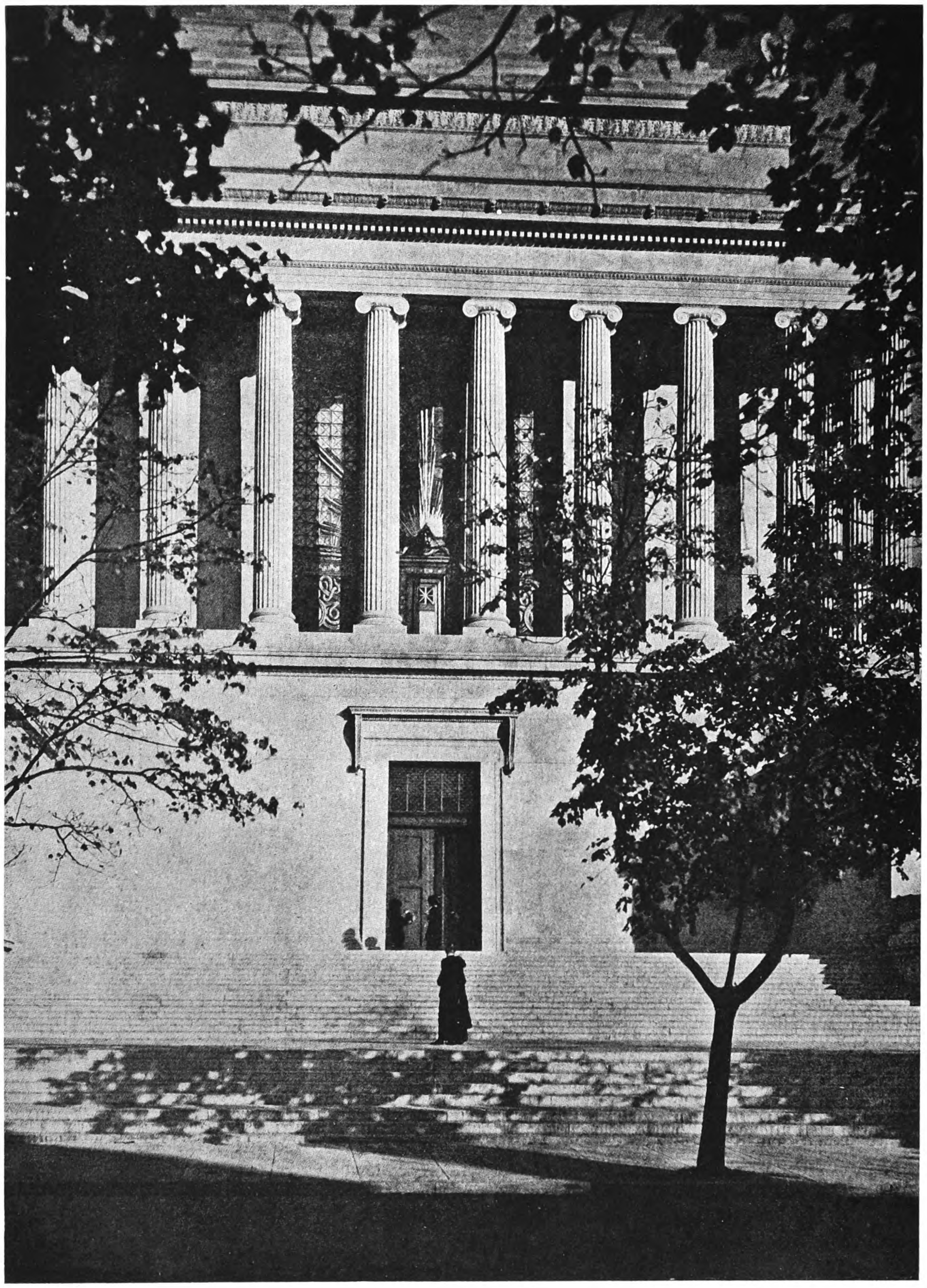
MR. JOHN RUSSELL POPE has erected many magnificent buildings in the United States, but he has done nothing finer than the Temple of the Scottish Rite at Washington. This monumental composition may surely be said to have reached the high-water mark of achievement in that newer interpretation of the Classic style with which modern American architecture is so closely identified. The building stands upon a site about 250 ft. square, and masses up impressively from all four sides. Granite steps lead up from the lower platform, rising in groups of three, five, seven, and nine, to the terrace in front of the entrance, and the monolithic columns above are 33 ft. in height, and just thirty-three in number—all this in accordance with masonic symbolism. On either side of the upper flight of steps are two sphinxes, by Mr. Weinman, symbolizing "Power" and "Wisdom," and across the platform in front of the main doorway is the following inscription in letters of bronze: "The Temple of the Supreme Council of the Thirty-third Degree of the Ancient and Accepted Scottish Rite of Freemasonry for the Southern Jurisdiction of the United States. Erected to God and dedicated to the Service of Humanity. Salve Frater!" Externally, the design is based on the Mausoleum of Halicarnassus. On the entrance floor the central space, practically a large hall, is termed the atrium, and from the side opposite the entrance doorway rises the staircase to the floor above; at the rear is a stack-room (with bronze stacks) containing a rare and unique collection of books on masonic lore; while to the right and left of the staircase are the reading-room and the Supreme Council Chamber. The atrium is flanked by two suites of offices, one for the use of the Sovereign Grand Commander, the other for



TEMPLE OF THE SCOTTISH RITE, WASHINGTON: PLAN OF PRINCIPAL FLOOR.
John Russell Pope, Architect.



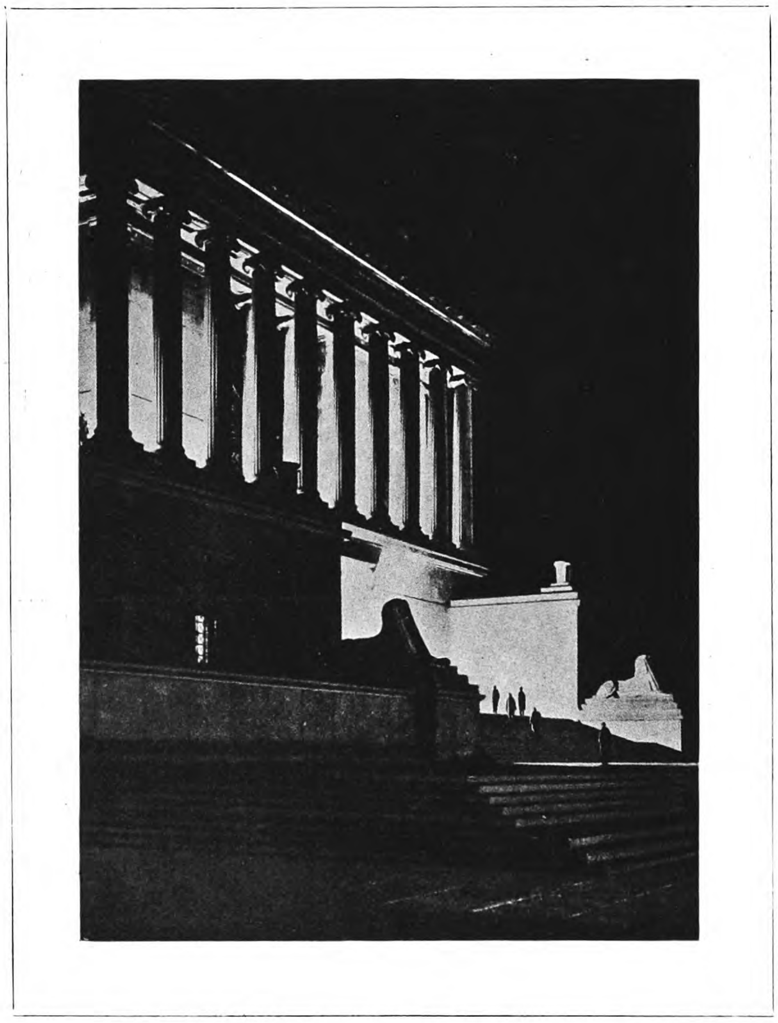
TEMPLE OF THE SCOTTISH RITE, WASHINGTON.
John Russell Pope, Architect.



TEMPLE OF THE SCOTTISH RITE, WASHINGTON: THE WEST FRONT.
John Russell Pope, Architect.

the Secretary-General. The basement beneath the atrium contains a large banquet-room with offices, kitchens, etc., and in the sub-basement an elaborate mechanical plant is installed.

The staircase, as it rises from the entrance floor, divides into two side flights to reach the landing in front of the Temple Room. The entire upper portion of the structure is devoted to this room, the only other feature of importance being the organ, which is absolutely hidden, being placed in the roof-space over the staircase, opening into the room through a grille in the domed ceiling. The music pervades the room, not seeming to come from any definite direction. The principal use of the Temple Room is to provide accommodation for the impressive ceremonies that take place actually only every other year, but it will often be used for other masonic rites, and the offices will, of course, be made use of at all times in carrying on the work of the Council.



THE TEMPLE ILLUMINATED AT NIGHT.

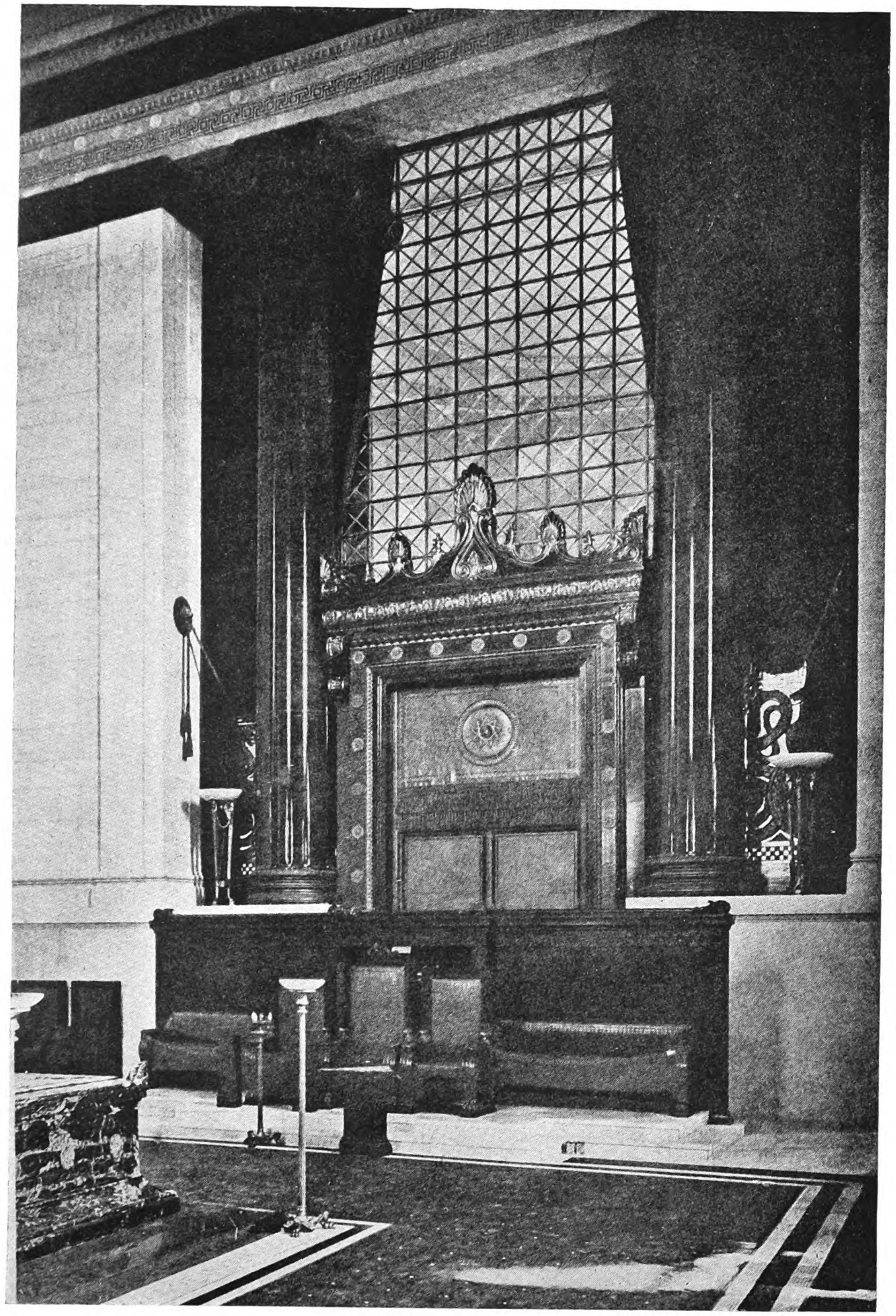
In the atrium the walls are of limestone, with the recesses plastered and tinted a tannish tone, above a marble dado; the frieze is painted with Greek decoration. The ceiling is finished with heavy beams of oak brilliantly touched in with a coloured decoration that reiterates Greek forms while repeating tones that are found on the outer cases of Egyptian sarcophagi. The recess behind the four huge polished green Doric columns of Windsor granite extends down both sides of the room. The floor is of Tavernelle marble, with a border and a centre of Tinos. Upon the floor rests a huge table of Pavonazzo, matching the seats in the aisles on either side.

The War having made it impossible to get certain European marbles—particularly the black marble ordinarily obtained from Belgium—it was necessary to find American substitutes. A Virginia quarry, never worked for this purpose before, was opened, and provided material which is fully equal in appearance to the imported marble.

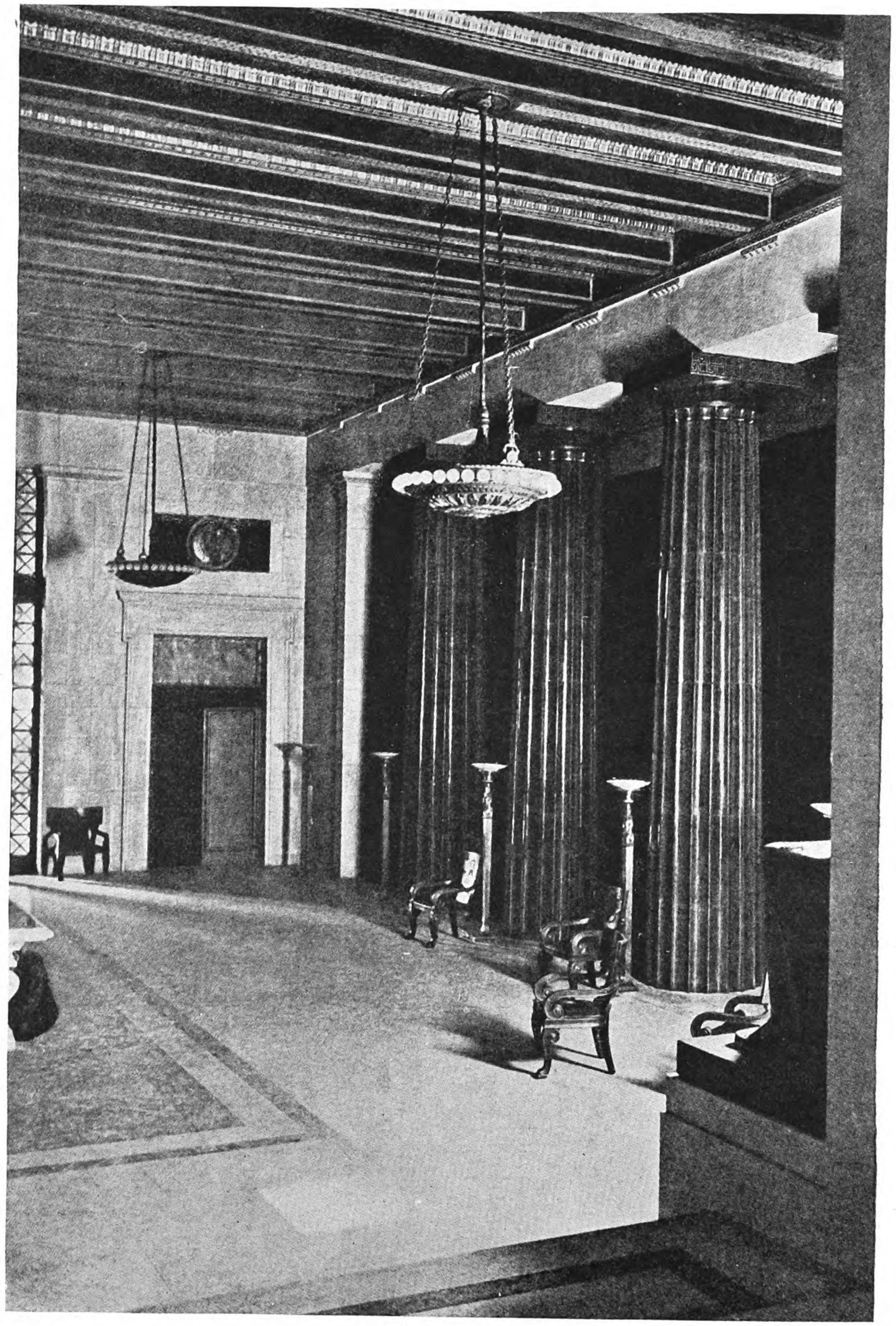
For the Temple Room substantially the same materials are used: green Windsor granite for the ten columns, walnut for the furniture, a polished black marble mosaic floor with white mosaic border and lines of inlaid bronze, and a central altar of black and gold on a black marble step. The walls are of limestone to the top of the entablature, which is highly ornamental and carries a black marble frieze inscribed with a bronze lettered inscription. Above this is a painted plaster dome. Except for the canopies over the thrones, woven materials have generally been set aside for others more permanent; leather, for instance, being frequently substituted.

It is interesting to learn that not only the general scheme but everything in the building was especially designed and made under the architect's direction. The fixtures, the furniture, the rugs, were elaborately studied and carefully worked out in this way. In the earlier studies the Temple Room was enclosed with solid walls, in front of which ranged the columns of the main colonnade. As the sketches progressed, however, these walls were opened out, providing a space for the bronze grilles shown in the photographs, and, incidentally, also providing the opportunity for a most unusual and beautiful lighting scheme. The room can be lighted in a variety of ways: from the bowls of the floor standards, from coloured lights placed in the top of the dado between the columns, which supplement the bowl illumination with greater volume of light and differing tones, from the glass skylight, from a recess above the cornice, and finally, and perhaps most weirdly of all, from the lights placed at the back of the colonnade outside the grilled windows. The illustration on this page shows the front of the building lighted up at night, when, as may be seen, it has a most striking and arresting appearance. Our reproductions are from "The Architectural Review" of Boston.

A few facts concerning the Mausoleum at Halicarnassus may be usefully added. From the ruins of the Mausoleum sufficient material has been recovered by the excavations carried out in 1867 by T. C. Newton to enable a fairly complete restoration to be made. According to Mr. Pullan, Mr. Newton's collaborator, of whose report a summary is given in the Encyclopædia Britannica, the building consisted of four parts—a basement or podium, a pteron or enclosure of columns, a pyramid and pedestal, and a chariot group. The basement, probably 51 ft. in height, and covering an area of 114 ft. by 92 ft., was built of blocks of greenstone and cased with marble, the monotomy of the plain courses being possibly broken by one or more belts of frieze. The pteron, 37½ ft. in height, consisted (according to Pliny) of thirty-six columns of the Ionic order, enclosing a square *cella*, the walls of which were relieved by friezes. From the portions that have been recovered it appears that the principal frieze of the pteron represented combats of Greeks and Amazons. Above the pteron rose the pyramid, approximating 108 ft. long and 86 ft. wide at the base, and mounting by twenty-four steps to an apex or pedestal, which possibly had a length of 25 ft. 6 in. and a breadth of 20 ft. On this apex stood the quadriga or chariot with the figure of Mausolus himself and an attendant deity acting as his charioteer.



The Temple Room.



The Atrium.

TEMPLE OF THE SCOTTISH RITE, WASHINGTON.

John Russell Pope, Architect.

NEW BOOKS.

A HISTORY OF ANCIENT AND MEDIÆVAL ORNAMENT.

DOES the average person really see ornament as it is? One rather hopes not, because the best ornament does not stand forth flauntingly from the unity which it should assist rather than destroy. Like charity, it vaunteth not itself, but takes its place meekly and unobtrusively as a subordinate part of a general scheme. When it asserts itself distractingly, it nullifies its true function. It does not adorn its environment, but discredits and outrivals it, and thus ceases to be ornament, for it fails of the duty assigned to it (at all events by the lexicographers); it is then not "something which, added to another thing, renders it more beautiful to the eye." It does not enrich that "something," but impoverishes it by a kind of treasonable usurpation. Unfortunately, it is this ostentatious sort of ornament that makes the strongest appeal to the uneducated eye, and hence its prevalence in all directions. It is because ornament is so generally regarded not as subservient to some larger purpose, but as an independent object, or "Thing-in-Itself," that "decorative effects" has become an accepted expression, connoting, for the artist, a riot of vulgarity, making the theatre, the restaurant, the abode of the *nouveau riche*, a nightmare of hideousness. Everywhere abundant evidence proclaims that the purpose of ornament is but rarely understood.

While it is impossible to suppose that in any age or country there ever has been, or ever will be, an overwhelming preponderance of good taste, yet to-day there are everywhere encouraging signs that the minority is becoming less negligible and more influential. That there is really a large public anxious to understand the principles of ornament is indicated by the rate at which books on the subject are increasing in number. Even supposing that the demand for such works proceeds exclusively from those who have a professional interest in the subject (and this is by no means the fact), the obvious inference would still be highly gratifying. Professional men, taken in the bulk, are powerless to soar much beyond the general level of the public taste; and that they are showing an unprecedented eagerness to study the best models and the best theses in this kind is a sure presage of a rising tide of intelligence. Not in vain were the preaching and teaching of Ruskin and Morris and Crane; the stone which they set rolling up-hill was not as the stone of Sisyphus. Willing hands have pushed it over the crest of the hill, and it is now trundling along in the right direction across a fairly level plateau and with visibly increasing momentum. Applied ornament is to-day steadily growing in grace.

Art schools, conducted on right lines, and setting before the student true principles, are flourishing according to their deserts. Universities are encouraging such studies; while the latest and for certain purposes the best book on ornament has been based on lectures delivered by the professor of the History of Architecture in Columbia University. That he had attentive hearers is plain from the dedication: "To my Students, in grateful recognition of their interest and devotion which for thirty-three years past have made teaching for me a continuous pleasure." That the pleasure must have been mutual and contagious is fairly obvious from the character of the book, which may be assumed to be the express image of this happy experience. Were not its size and price rather prohibitive, it would make an ideal class-book, and we venture to suggest the issue of a cheap edition for the use of students, for whom, on this subject, it is the most lucid and most comprehensive guide with which we are acquainted.

Most works on ornament seem to consist of a fortuitous concourse of examples, with a few words of description somewhat grudgingly added. Mr. Hamlin has chosen the more laborious but more scientific method of historical presentation. His examples, more than four hundred in number, have been carefully chosen not because they are beautiful or quaint, but for their intrinsic value in illustrating the history, evolution, or progress of decorative design. He expounds the principles of ornament, analyses specimens, and classifies the designs, with a minuteness that, while it may occasionally appear a little elementary for the expert, is invaluable to the student, to whom it affords a solid basis of operations. Pure ornament, Mr. Hamlin assumes in his excellent introduction, "may be classified according to any of several principles: e.g., according to—A. Its way of covering space; B. the manner and means of its production; C. The method or principle of its design; D. The object to which it is applied; E. Its relation to structure." Each of these divisions is carefully expounded, and is illustrated by examples. Under A it is explained that "According to the way in which ornament covers space, it may be divided into linear, all-over, and radiating ornament. Each of these may be subdivided into continuous and discontinuous ornament." Further, "In linear ornament the motives are arranged in sequence along a single line, to form bands or borders. . . . In 'all-over' patterns the units are arranged along two or more intersecting systems of lines so as to cover a broad surface. . . . In radiating patterns the surface is covered by units radiating from a central point. . . . In each of these cases the ornament may be continuous, each unit being connected with its neighbours . . . or discontinuous . . . Continuous 'all-overs' forming a mesh of two sets of intersecting lines are called *quarries* (from the French *carré*=square). Discontinuous all-overs are called *powderings*; more rarely they are said to be *spangled*. . . . When isolated units are powered or spangled in the meshes of a quarry, the combination is called a *diaper*." All the other headings are similarly expounded, with illustrations in every case. It is all very rudimentary, no doubt; but then it is exactly the kind of information that the student requires. A good glossary of the terminology of decoration could be compiled from Mr. Hamlin's definitions, and would make a useful appendix to the book, although the very full index meets the purpose in a more diffuse way.

In the nineteen chapters into which the book is divided, primitive and savage ornament naturally takes the first place, and it is followed in due order by description, discussion, and illustration of examples from Egypt, Chaldea and Assyria, Western Asia, Ægea and Asia, Greece, Rome, Pompeii, from the practice of the Early Christians, and so on through Byzantine to Romanesque, and Gothic in several kinds and of several countries. Throughout, the text is most thorough, comprehensive, and conscientious; and if, as already hinted, the matter is occasionally a little jejune, that is the almost inevitable defect of its quality. Where learners are concerned, it is better to explain too much than too little. Hence the banality of passages like this will be readily condoned: "The

Hellenic peoples were gifted with an especial endowment of the artistic faculty. While their geographical situation brought them early into contact with the older civilizations of Egypt, the Mediterranean basin, and Mesopotamia, their own æsthetic aptitudes enabled them to assimilate all that they borrowed, and, in transforming it, to endow it with a wholly new elegance and refinement." What immediately follows is well and clearly expressed: "Two characteristics are conspicuous in all their intellectual and artistic activity: their attitude of persistent inquiry in the presence of every fact and phenomenon of their experience; and their recognition and pursuit of ideals. The Greek asked Why? Whence? How? where other peoples had simply acquiesced unquestioningly in Nature's order or the teachings of tradition, and he strove unceasingly after unrealized perfections in every undertaking. The progress of Greek civilization stands therefore in sharpest contrast with the slow advance and slow decline of Egyptian art bound by ancient and sacred traditions, and with the stagnation of Assyrian art. It was from the earliest stages progressive, and in this respect breathes the modern spirit and appeals to modern tastes." Sound doctrine, admirably expounded, and a fair sample of the author's lucidity and correctitude. The illustrations, having been all specially drawn or photographed, have a freshness uncommon in this kind of work. Mr. Hamlin announces his intention of devoting a further volume to the history of Renaissance and other modern ornament, if the present work finds favour. On its merits, the book should certainly meet with unequivocal success. To the architect it is extremely valuable, and the art teacher should deem it indispensable.

"A History of Ornament, Ancient and Medieval." By A. D. F. Hamlin, A.M., L.H.D., A.I.A., Professor of the History of Architecture in Columbia University. With 400 *illustrations. Pages* xxiv + 406, 6½ *in. by* 9½ *in. Price,* 15*s. net. New York: The Century Co. London: B. T. Batsford, Ltd.,* 94 *High Holborn.*

AN ELIZABETHAN COUNTRY HOUSE.

SIR PIERS LEGH, the seventh of this ancient knightly line, who all bore them bravely in the wars—Sir Piers the First served with the Black Prince—built him a house at Lyme, in Cheshire, some time after his inheritance of the title in 1541. A goodly house it must have been from the first, as the Lady Newton shows in a transcript from one of the family documents of which she found good store in a forgotten cupboard—a lucky find, for her ladyship has based upon it a most interesting book. Thus runs the description of the house as it was in 1465: "One fair hall with a high chamber, kitchen, bakehouse and brewhouse, and a fair park, surrounded with a paling, and divers fields and heys contained in the same park with the woods, underwoods, meadows, feedings and pastures thereto belonging, which are worth to the said Peter x^l a year"—a small sum for so large an estate, even when due allowance is made for the vast subsequent change in currency values. That "fair park surrounded with a paling" must have been one of the earliest instances of the kind. Its extent, Lady Newton informs us, is about 1,500 acres, and it has at the present time a circumference of about nine miles. In pursuance of a licence from Queen Elizabeth, it was at the beginning of the seventeenth century surrounded by a wall.

On one of the highest points of the moor that forms part of the park there stand two stones of which the purpose baffles conjecture. Of unknown antiquity, they are circular pillars, having a circumference of 4 ft. at the base, tapering to 2 ft. at the top. They are fixed into roughly hewn stone sockets. Of course, complete ignorance of their origin has given rise to the most fanciful suppositions, and the stones, probably innocent of guile, have not escaped the accusation that they were in some way associated with "human sacrifice." Most probably they were merely boundary marks, but this assumption is far too prosaic to satisfy the romantic imagination of the baffled archæologist, who, like the nonplussed philologist, is never better pleased, and never more emphatic, than when he has wildly imagined a vain thing. Two gravestones near the pillars are, as usual, said to cover the remains of people that died of the plague. Certainly the plague was very deadly in the district in the seventeenth century (one of the stones bears the date 1646); and Lady Newton mentions the interesting fact that to this day at Eyam, in Derbyshire, a sermon is annually preached from the open-air rock pulpit which was in use as a precaution against infection at the time when the scourge was raging three centuries or so ago. Do we find here the chief reason for the erection of the outdoor pulpits of which there are many ancient as well as a few modern examples?

Lyme House, to which each successive owner has made additions, is built of grey stone, quarried locally. It has the customary courtyard or quadrangle of the period of its origin. The building itself is nearly square, the four corners corresponding as closely as possible to the points of the compass. "The approach from the park is through a fine gateway leading into a large outer quadrangular courtyard, enclosed in former days by a wall, which was replaced in the eighteenth century by the present iron railings. The gateway is flanked by two watch-towers, in each of which is a tiny room with leaded windows on the outer side, and doors on the side of the quadrangle. Couchant lions—two each side, lying back to back—form the tops of the towers, while an arch with an urn upon it spans the space between, thus connecting both towers."

To "that shadowy personage John of Padua" is ascribed the design of the older portion of the building; and in 1726, Giacomo Leoni, at that time doing much architectural work in England, faced the whole of the south front and built a fine Ionic portico projecting 12 ft. and reaching to the top of the house. "Leoni also added a covered gallery round the courtyard reaching to the second floor, giving access to the rooms on the first floor, which formerly all opened one into the other, and had no separate entrances except at the two ends." Instances of this barbarous method of planning are still extant. One came across an example the other day—you had to go through the landlady's bedroom to get to your own. Carthorses should not drag from us the locality of this indelicate survival. Rusticated stone arches, forming cloisters, support the gallery: "the whole much resembling an Italian palace."

In 1810 Sir Jeffrey Wyatville took down an old octagonal lanthorn-shaped tower, substituting for it a square tower. At the same time, says Lady Newton, he "provided the house with some much-needed bedrooms," and in a piquant footnote it is observed that Wyatville, who was born in 1766 and died in 1840, was, as an architect, much superior to his uncle James Wyatt, "who has been often styled 'the execrable James.'" It is a poor way to go down to posterity, and we do not think that James altogether merited this invidious distinction. He had studied in Rome, and his adaptation of the old Pantheon in Oxford Street for dramatic performances was much admired by his contemporaries. Perhaps he became execrable when he forsook the Classic style and built in sham Gothic Fonthill Abbey for William Beckford, which is

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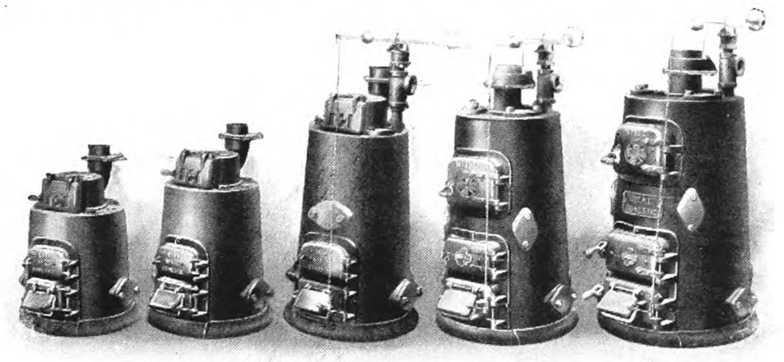

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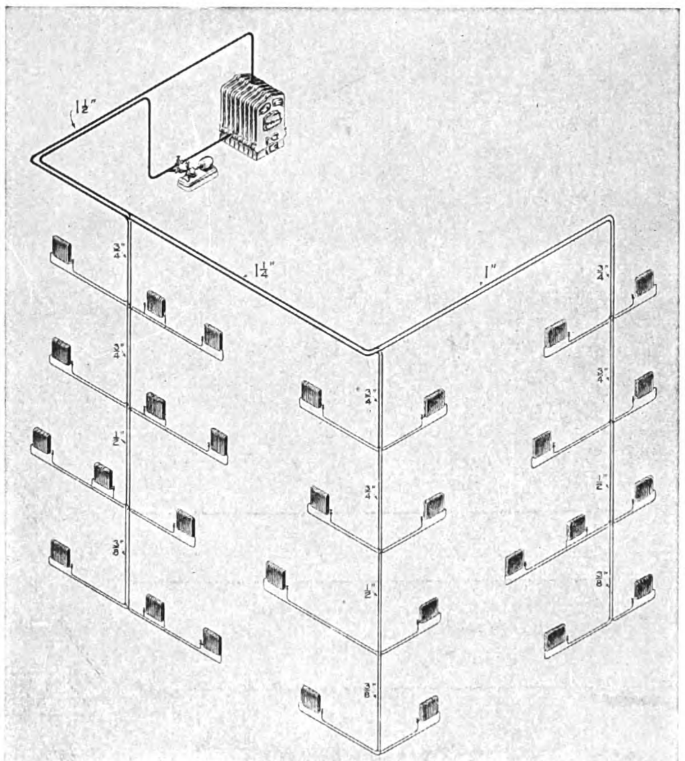

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more truly called "Beckford's Folly" than Wyatt's. His nephew, Sir Jeffrey Wyatville, R.A., was at one time in partnership with his uncle James, but in 1799 went into business with a builder and was extensively engaged on Government contracts, finding time, nevertheless, for much important domestic work—at Wollaton Hall, Woburn Abbey, Chatsworth, and elsewhere. He was knighted in 1824 (when he changed his name to Wyatville), and from that date until his death he was architect in charge of Windsor Castle, where he completed the quadrangle and staircase of George III, and rebuilt the Brunswick Tower.

About Lyme House there is much respectable old leadwork, and the interior is rich in interest. In particular, the drawing-room has suffered nothing from the interference by successive owners which has vitiated the purity of the other apartments. It dates from about 1580, and is panelled to within 4 ft. of the ceiling with oak inlaid with satinwood. Above it is a panelled plaster frieze supposed to be the work of Italians; while the ceiling is a fine confusion of strapwork and bosses. Lyme House is a treasury of old furniture and old pictures; the portraits, if one may judge them from the many specimens reproduced in this handsome volume, are in several instances of great value and high merit. As we have seen, Lady Newton's book is of considerable architectural interest; but its main interest is annalistic. It is, we imagine, a rather important contribution of materials for the historian and the antiquary. For the general reader it is a most charming book to lay upon the drawing-room table, and Lady Newton has done the State some service in publishing it.

"*The House of Lyme, from its Foundation to the End of the Eighteenth Century.*" *By the Lady Newton. Illustrated. Pages,* xvi + 356, $6\frac{3}{4}$ *in. by* $9\frac{3}{4}$ *in. Price* 21*s. net. London*: *William Heinemann,* 21 *Bedford Street, W.C.*

NOTES OF THE MONTH.

National War Memorial Competition.

His Majesty's Government offer prizes, amounting in all to not less than £500 (in proportions to be subsequently decided), for a limited number of the most successful models for a small memorial plaque in bronze, to be given to the next-of-kin of those members of His Majesty's Naval and Military Forces who have fallen in the War. The names of competitors will not be revealed to the judges, and the name of the premiated artist or artists alone will be published. All competitors must be British-born subjects. The following information is officially issued as a guide for competitors: The memorial is to take the form of a bronze plaque, with an area of as near as possible 18 sq. in.; e.g., it may be a circle of $4\frac{3}{4}$ in. in diameter, or a square of $4\frac{1}{4}$ in., or a rectangle of 5 by $3\frac{3}{5}$ in. The plaque is to be produced by casting from a model, which should be finished with precision. All designs submitted must be actual models in relief in wax or plaster of the size indicated. No models on a larger scale will be considered, and no competitor may submit more than two models. The design should comprehend a subject and a brief inscription. It is suggested that some symbolical figure subject should be chosen, but the following inscription has been decided upon:

HE DIED FOR FREEDOM AND HONOUR,

and must form part of the design. Since the surname of the person commemorated and the initials of his Christian names are to be engraved on the plaque, the design should be arranged so as to leave space for the name within the dimensions mentioned. In the case of a rectangular design, this space should be left at the base; if the design is circular, a margin surrounding or partially surrounding it should be left free. The design should be essentially simple and easily intelligible. No framed models can be accepted, but each model should be packed in a small box and delivered to the Director, National Gallery, Trafalgar Square, W.C.2, not later than 1 November 1917. The model must not be signed, but should be marked on the back with a motto or pseudonym which should also be written on a sealed envelope containing the competitor's name and address. No other communication should be attached. The models to which prizes are awarded shall be the sole property of the Government, who will arrange for the appearance of the artist's signature or initials on the finished plaque.

* * *

Wood-worms in Westminster Hall.

The wood-worm which has damaged the timbering of Westminster Hall throughout the centuries is well on the way to being exterminated. The name of the interesting creature, said Mr. Frank Baines, architect to the Office of Works, "is *Xestobium tessellatum*, and it does all its destructive work while in the larval stage. As a beetle it is harmless; as a grub—well, I could bury you waist-deep in some of the holes it has made in the oak-work of the hall. It lives only in oak. Mr. J. King, M.P., made an examination of the hall some time ago, and came to the conclusion that the damage was comparatively recent; but I am convinced that it has been going on for more than four hundred years. Some of the patching done a hundred years ago has been attacked. All other methods of exterminating *Xestobium tessellatum* having failed, I called in the assistance of Professor Maxwell Lefroy, and he invented a spray, which is constituted thus—50 per cent. tetrachlorethane, 6 per cent. cedarwood oil, 2 per cent. solvent soap, 2 per cent. paraffin wax, and 40 per cent. trichlorethylene. The first is a perfect insecticide, and is so dangerous that those who handle it must use gas-masks. The cedarwood oil protects the wood against future attacks and the scent impregnates the timber and keeps the beetles away. The soap holds the oil and renders the wood non-inflammable, and the paraffin wax prevents chemical action. The trichlorethylene is a solvent and diluent, and is itself a feeble insecticide. The roof has been sprayed with this stuff several times, but the last drenching must have caused a positive *battue*, and I am confident that the plague will be effectively stayed. This drastic treatment is a last measure of protection, and science can suggest nothing further at present."

* * *

An English University as a National War Memorial.

Mr. H. A. L. Fisher's aspiration for an English university as a national War memorial ought to materialize, says "The Architects' and Builders' Journal." What exactly his idea is he has left to conjecture; and a national university is without exact precedent. Its form and its functions are therefore alike nebulous, but what a magnificent building the idea conjures up in the mind's eye of the architect. It should outvie the grandest buildings of Greece and Rome, because it would commemorate a greater occasion than any that is recorded in ancient history, and would mark also the resolve of this great nation to bring about the unity which is as essential to the victories of peace as it is to those of war. Certainly it must be a noble building—so much may be taken for granted; but before it can be designed the architect must have some conception of the work it will do. Probably the

Minister of Education himself has but a shadowy idea of what duties will devolve upon it. One supposes that it will not be a working university—a lineal descendant, through Oxford and Cambridge, of Paris, Bologna, and Padua. These stand for the worn-out mediæval traditions which the War will enable us to discard utterly. Rather will it be a clearing-house—we purposely introduce this essentially modern expression—for national education. All the older universities, if they are to survive the coming renascence, must burn their ancient idols and conform to reason and utility. They must not be allowed to continue to waste more bright young lives than the War has robbed us of. They must cease to occupy themselves with dead languages and effete philosophies, and must be made to justify their existence by contributing substantially to the development of modern forces. They must admit science and art to their rightful places—must assist intellectual evolution instead of retarding and stultifying it. In short, they must respect the dignity of business, and ensue it.

* * *

Standardized Plans and the Housing Problem.

Mr. Baillie Scott has addressed the following letter to "The Times": "As one who has had considerable experience in the designing of small houses and cottages on economical lines, will you allow me space for a few comments on the suggestions made by the Joint Committee on Labour Problems in connexion with the proposed scheme for building a million houses? However urgent the demand, it must be borne in mind that these houses will constitute a permanent part of the new England to be built up out of the ruins of the War. To allow each locality to build its own quota without restrictions or control would mean, in the majority of cases, the creation of rows of those mean and sordid dwellings we are all so painfully familiar with on the outskirts of our towns. To produce the best results, in the circumstances, it is essential that there should be a central committee to advise as to the plans of the houses and as to their arrangement on the ground. This committee should consist of architects who have made a special study of this kind of work. If we possessed, as in the past, a sound habitual tradition of building, the matter might safely be left to individual communities to adorn the world with cottages rationally planned, and each with its own particular local character and beauty. That is for us to-day an ideal we cannot hope to achieve; under modern conditions it seems inevitable to admit the economic advantages of standardization and repetition of plans. This makes it all the more necessary that the plans so standardized should be the best that can be procured. I am entering no plea for what is now known as 'artistic' building. I only ask that these new houses should be at least as scientifically adapted to their uses as our implements of war—that they should be rationally and sensibly designed and built, and so should possess that comeliness of aspect which results from the possession of these qualities. This end cannot be achieved by the policy of laissez-faire, but only by inviting the aid of those who have made a special study of the subject."

* * *

Uppingham War Memorial Scheme.

Uppingham is now to be reckoned among the public schools that have decided to include building in their War-memorial schemes. A "great memorial quadrangle, of which the present schoolroom and chapel will form part," is to be completed by the erection of a hall and colonnade. That most of the great public schools seem bent on building is easily explicable. With civilized man, building is a healthy and natural instinct, which is exercised whensoever and wheresoever a valid opportunity arises. Then, there is no more noble way of expressing veneration for the dead than by erecting a stately architectural monument. A minor consideration is that many of our public schools have been long in need of additional buildings, and it is with perfect legitimacy that this opportunity of getting them is seized—not, we are sure, with callous adroitness or indecent avidity, nor even consciously, for in every case the *primum mobile* is clearly a decorous and unsophisticated desire to commemorate the heroic dead.

* * *

The Soane Curatorship.

We are glad to notice that Mr. Arthur T. Bolton, F.S.A., F.R.I.B.A., has been appointed Curator of Sir John Soane's Museum, Lincoln's Inn Fields, in succession to the late Mr. Walter L. Spiers. Mr. Bolton was the 1893 Soane Medallist, and two years later gained the Institute Medal for Essays. A vice-president of the Architectural Association, he was the first master of the A.A. Day School, and has been a member of the Art and Literature Committees of the Institute. He is the author of several excellent architectural essays, which invariably exhibit the rather rare combination of sound criticism and patient research. These qualities are exemplified in his many contributions to THE ARCHITECTURAL REVIEW. Mr. Bolton was educated at Eagle House, Wimbledon; Haileybury; University College, London; and at the A.A. Schools. Articled to the late R. W. Edis, F.S.A., he commenced practice in 1890 at Westminster, and, besides much good domestic work, has designed the Sanitas offices and factories at Limehouse; Ingram House, Stockwell; and the Allan Line offices in Cockspur Street. On the death of the late Mr. Harry Stock, F.R.I.B.A., Mr. Bolton completed the Hamburg-Amerika Line offices, which are also in Cockspur Street.

* * *

"The Crafts and Modern Life."

Lecturing on the above subject before the Arts and Crafts section of the recent Hampstead Conference, Mr. H. Wilson referred to the misconceptions which prevail as to the aims of craftsmen and the revival of craftsmanship. He denied the suggestion so often made that craftsmen were only able to make things which were costly, or that the tendency on their part was to hold aloof from modern life. The craftsmen wanted to see the people of the country provided with better cups and saucers and better doors and chairs equally with well-planned and beautiful cities. So far from wishing to hold aloof from modern things, the artist was to assist the industry of the country; but experience has shown that English manufacturers were not prepared to pay an adequate price for work done. It was this question of cheapness which would have to be faced. Politicians and others were now considering the question of reconstruction, and their ideas seemed to run on the lines of an intensified factory system—an extension of the system which had produced so many of the evils of the present day. It was for the craftsmen to push forward a better ideal, and they looked forward to the teaching of craftsmanship in the schools, which would increase the number of independent craftsmen. In the new England which they hoped would arise after the War, it was their hope to see craftsmen settled in villages and to find their products distributed by a co-operative system.

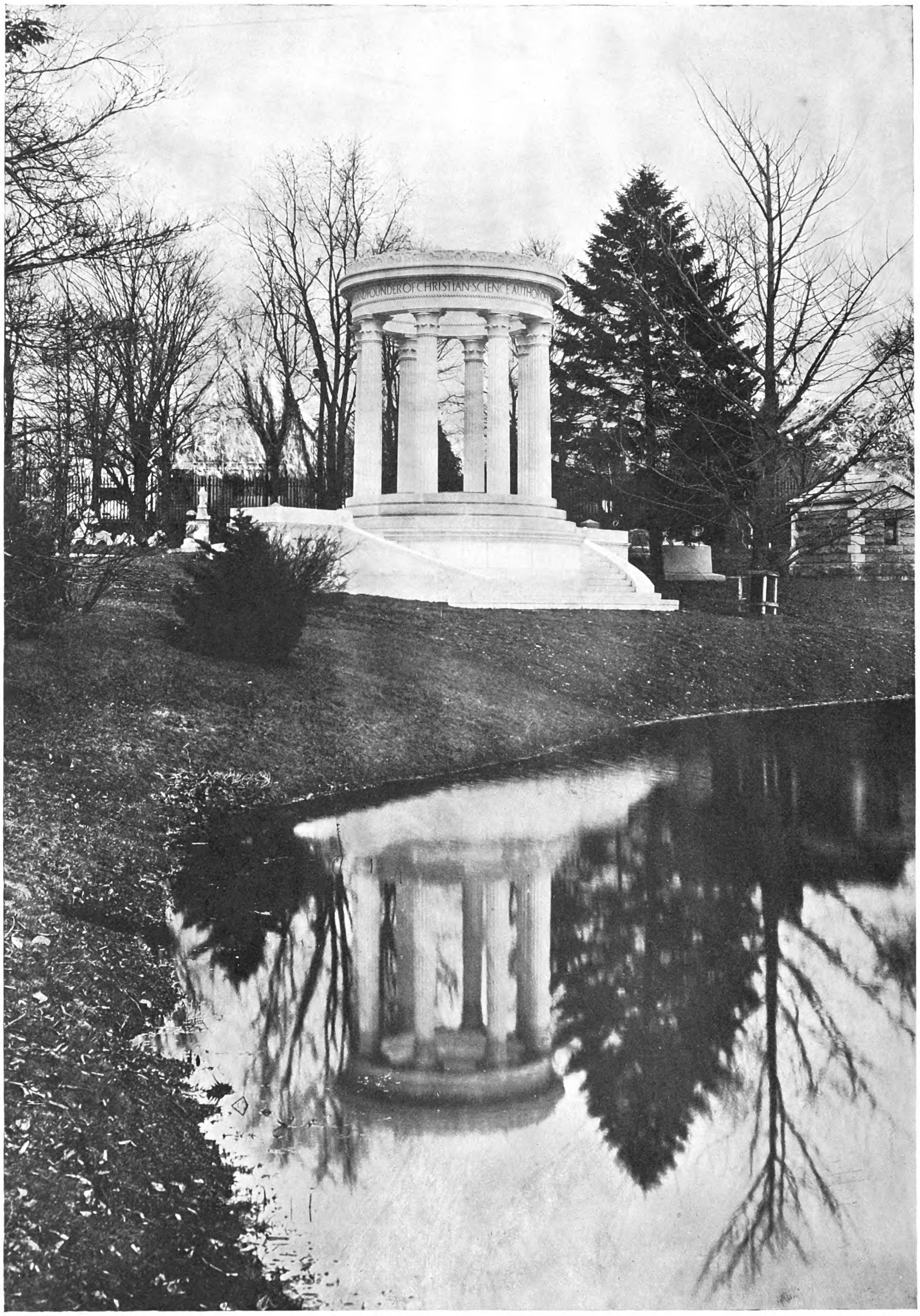


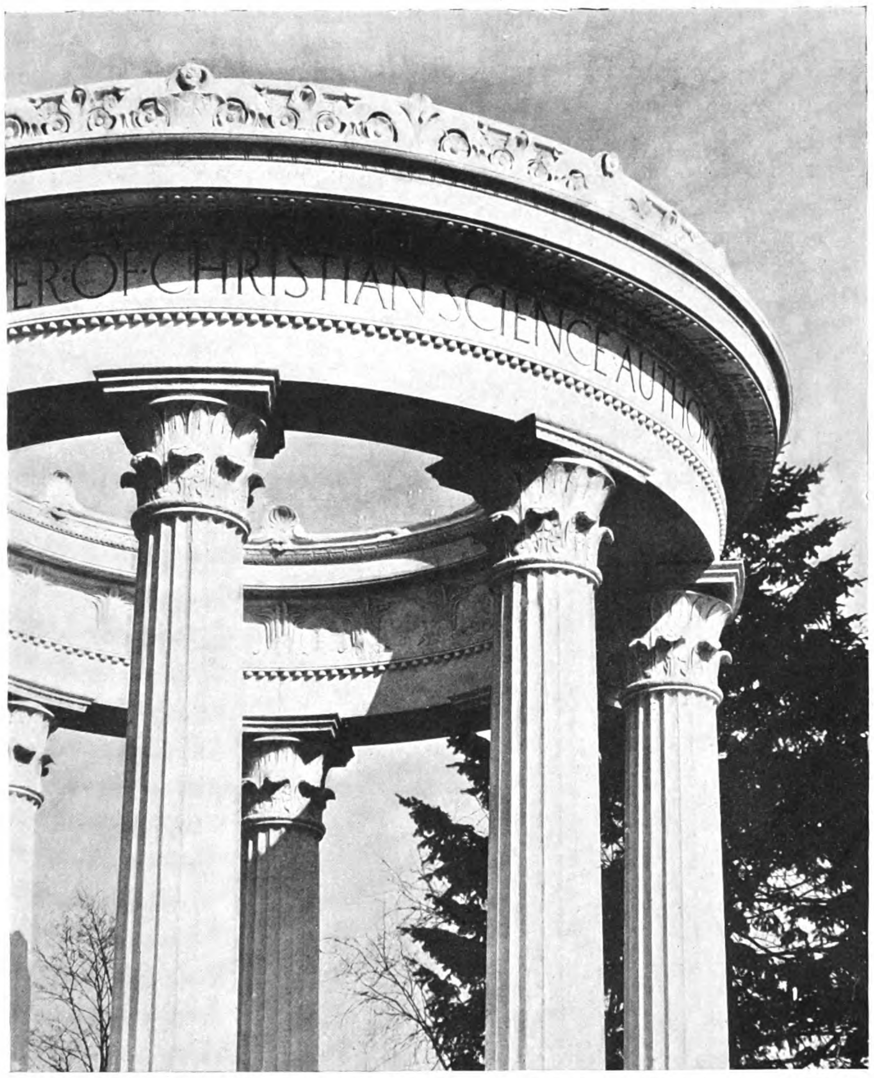
Plate I. October 1917

THE MARY BAKER EDDY MEMORIAL, MOUNT AUBURN CEMETERY, CAMBRIDGE, MASS.

Egerton Swartwout, Architect.

THE MARY BAKER EDDY MEMORIAL.

THE memorial to Mary Baker Eddy, which has recently been erected in Mount Auburn Cemetery, Cambridge, Mass., from the designs of Mr. Egerton Swartwout, has been, as regards its scheme, a gradual development of the original conception, and its final form was influenced in greater or less degree by the character of the subject, by the site, and by the material that was finally adopted. It was essential that the memorial should be simple and dignified in character; not over-ornamented, and yet worthy of its high purpose; strong, and yet expressing in its detail feminine rather than masculine power; and, above all, it should not be in any sense a copy of any existing structure.



DETAIL OF PERISTYLE.

The site is singularly pleasing. It can be seen from all sides equally well, close at hand from the cemetery road, and from a quarter of a mile away across the lake. Indeed, it is this body of water which forms the chief charm of the site. There is a fall of approximately ten feet from the level of the road to the level of the lake, the natural terrace on the axis of the plot lending itself admirably to the architectural development of the memorial. This change of grade in the memorial is accomplished by a double flight of circular steps leading from the platform in front of the memorial to a similar platform some five feet below it on the lake side, and these circular steps, as seen from across the water, seem to embrace the memorial and give it a substantial foundation, and by their curved lines complement the curve of the colonnade above. This lake is usually still, and has a mirror-like quality which reflects admirably the white granite of which the memorial is built.

The original scheme was essentially a marble design, as it seemed that in no other material could the requisite fineness of detail be obtained; but after much investigation it was decided to abandon marble as not sufficiently durable and lasting, and white granite from the Bethel quarries was finally selected. It then occurred to Mr. Swartwout that it might be advisable to use bronze for the more delicate ornament that could not be carved in granite, and that this bronze might be white, rather than of the more customary colour, so that there should not be too much contrast with the granite. After great deliberation, this idea was given up, because the ornament looked a little spotty, due to the fact that almost all the work was curved, and the bronze was constantly seen in different lights.

Mr. Menconi, the modeller and carver, then made a series of experiments with the granite, under the direction of the architect and the Christian Science Board of Directors, to determine just to what extent the carving could be carried, and it was found that with the aid of modern methods this hard granite could be carved with the delicacy of marble, and that wonderful results could be obtained. It took a long time to carve the granite in this manner, on account of the hardness of the material and its brittleness, and the greatest care had to be exercised; but the result has certainly justified the time and expense entailed. It is doubtful whether such perfection and delicacy have ever been attained before in this unyielding and enduring material. There seems to be nothing in modern times to compare with it, nor is it excelled in any of the monuments of antiquity. The Greeks and Romans employed granite but little, and while the Egyptians have left some wonderful carving in that material, they did not carry their work to such an elaborate or delicate finish.

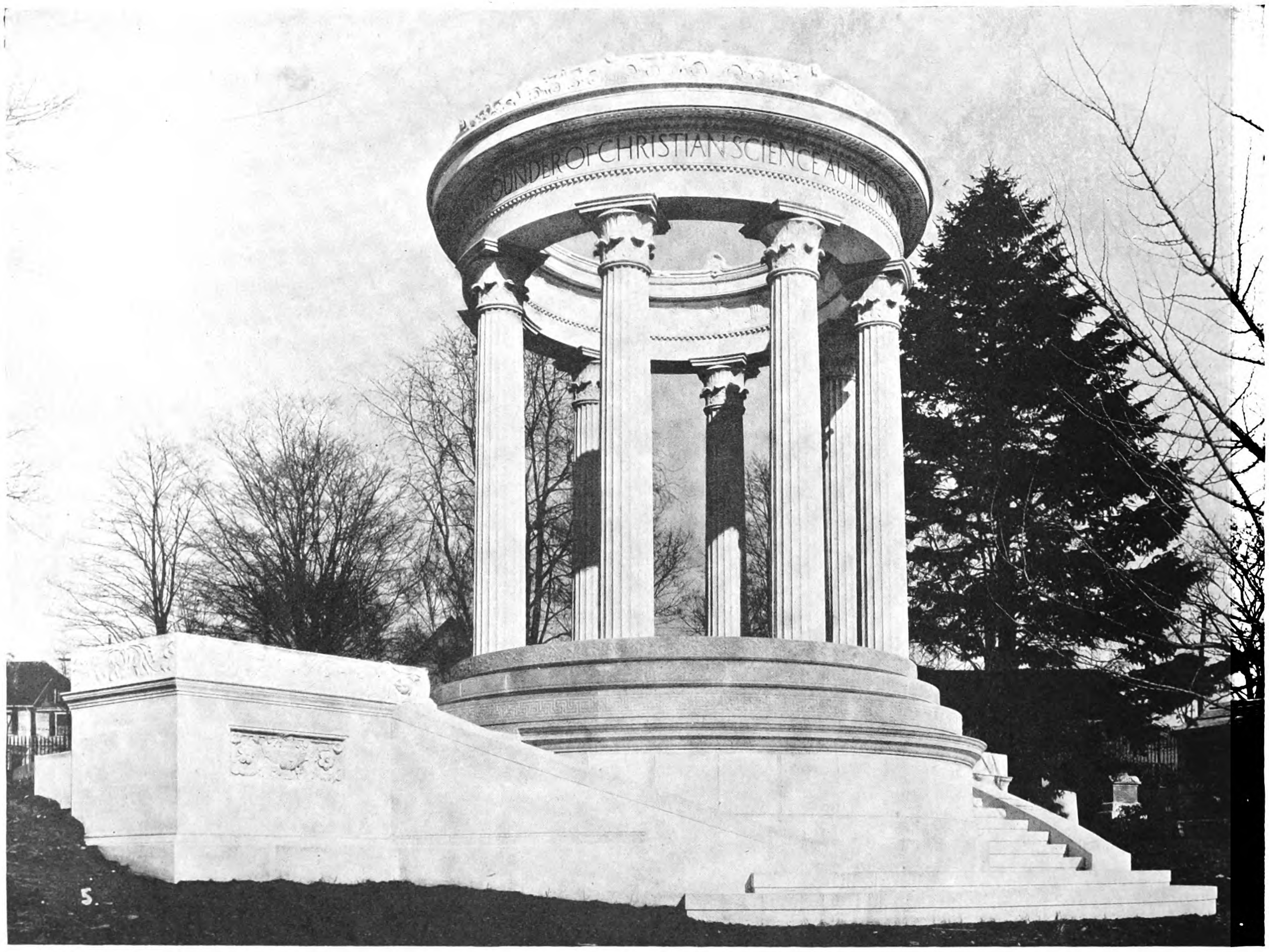
Having discovered that almost anything could be done in granite, Mr. Swartwout proceeded to develop in plaster the model of the complete memorial at full size. This model was the subject of the greatest painstaking care and attention on the part of Mr. Menconi and the architect, and at least six months were occupied in study and revisions. It was early decided that the ornament itself should not be as highly conventionalized as is usual in Classic work, but that floral forms should be used exclusively, and it was specially desired to make use of the wild rose as a *motif*, as this was Mrs. Eddy's favourite flower. The task of carving a wild rose in granite appeared to be rather formidable; but it was found, after repeated attempts, that it could be done. In the two rose panels in each of the pylons there is a vibrant living effect that is almost inconceivable in any other material, even in bronze.

The detail is novel; it is not a copy of any highly conventionalized type, but at the same time it still retains its Classic feeling. It is interesting to note that in the best period of Greek and Roman art the detail was not the stiff formal thing that is usually imagined by modern restorers; it was highly conventionalized, but yet it was free, and the greatest individuality was displayed by the carver; no one piece of ornament was exactly a replica of another piece, and this same feeling has been obtained in the memorial. Freedom and individuality were secured by stimulating the carvers themselves with the promise that when a man had succeeded in doing an especially fine piece of carving he would be permitted to put his name upon the stone—not, indeed, upon the face where it would be seen, but upon the bed where it would be concealed, and so the individual man felt that there was a recognition of his own ability, and that that was his stone, and his name was on it. There were about twenty of these carvers, all from Northern Italy, and they were all master carvers. It happened that the work was done in the winter, when there was little carving to be done, and the pick of the profession could be readily obtained.

The panels in the pylons are a little over 1 ft. high and about 3 ft. long, and are in high relief, the detail being elaborated to an extent never before attempted in granite. Some of the stems of the leaves are no bigger than a match, and some of the larger stems and leaves are virtually free-standing, so great is the relief. The entire memorial is cut not by a machine, but by hand, and a smooth eggshell finish is obtained for the entire structure by the use of the pneumatic tool. By this original treatment the granite appears much whiter than if the same smooth surface had been obtained by rubbing.

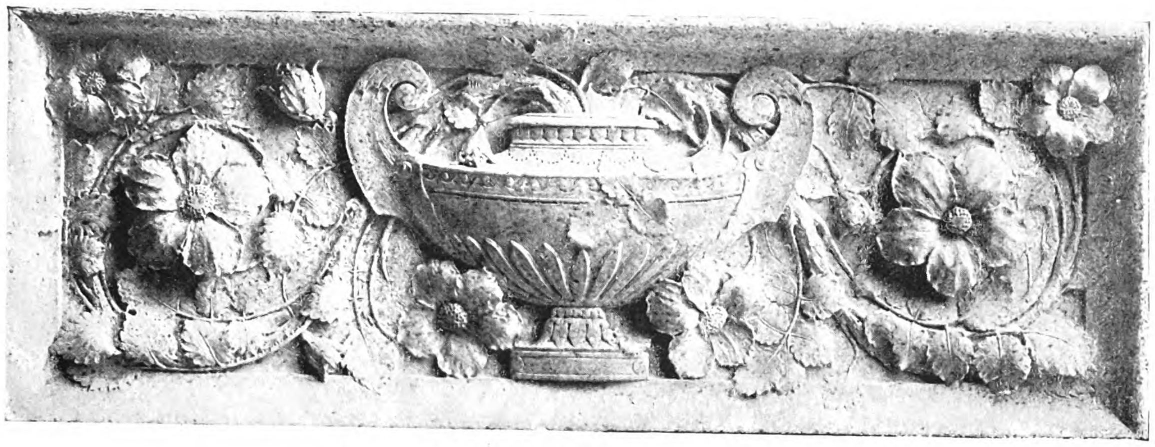
The white bronze is an alloy containing an unusually large proportion of tin, and is known in the trade as Benedict metal. It does not turn black as does ordinary bronze by exposure to the elements, nor does it stain the stone. It is a dull pewter colour, with a golden tinge, which harmonizes extremely well with the granite.

The memorial itself consists of a circular colonnade of eight columns, 15 ft. in height, surmounted by a cornice and a cheneau course or cresting. There is no roof or covering; the colonnade is open, and similarly there is no pavement in the circle enclosed by the columns, nor is there any stone structure of any kind over the grave itself; the space between the columns will be filled entirely with growing flowers, rhododendrons possibly, or plants whose flowers will be large enough to be in scale with the memorial. This colonnade rests upon a stylobate of three steps, surrounded on the road side by a broad platform of Pompton pink granite, which makes admirable contrast with the white granite of the

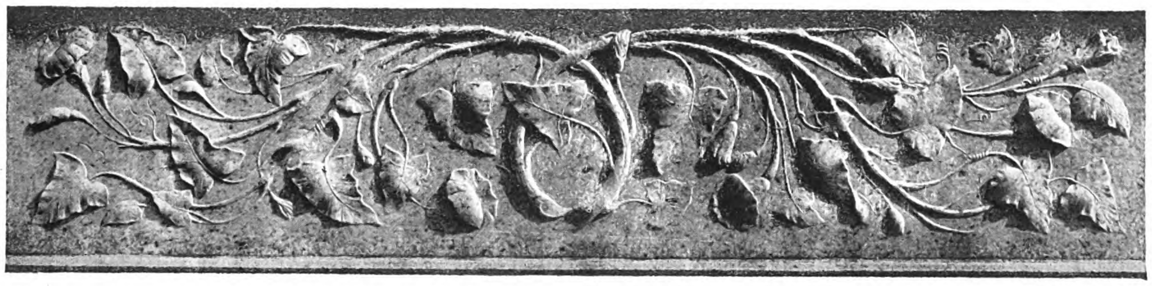


THE MARY BAKER EDDY MEMORIAL, MOUNT AUBURN CEMETERY, CAMBRIDGE, MASS.

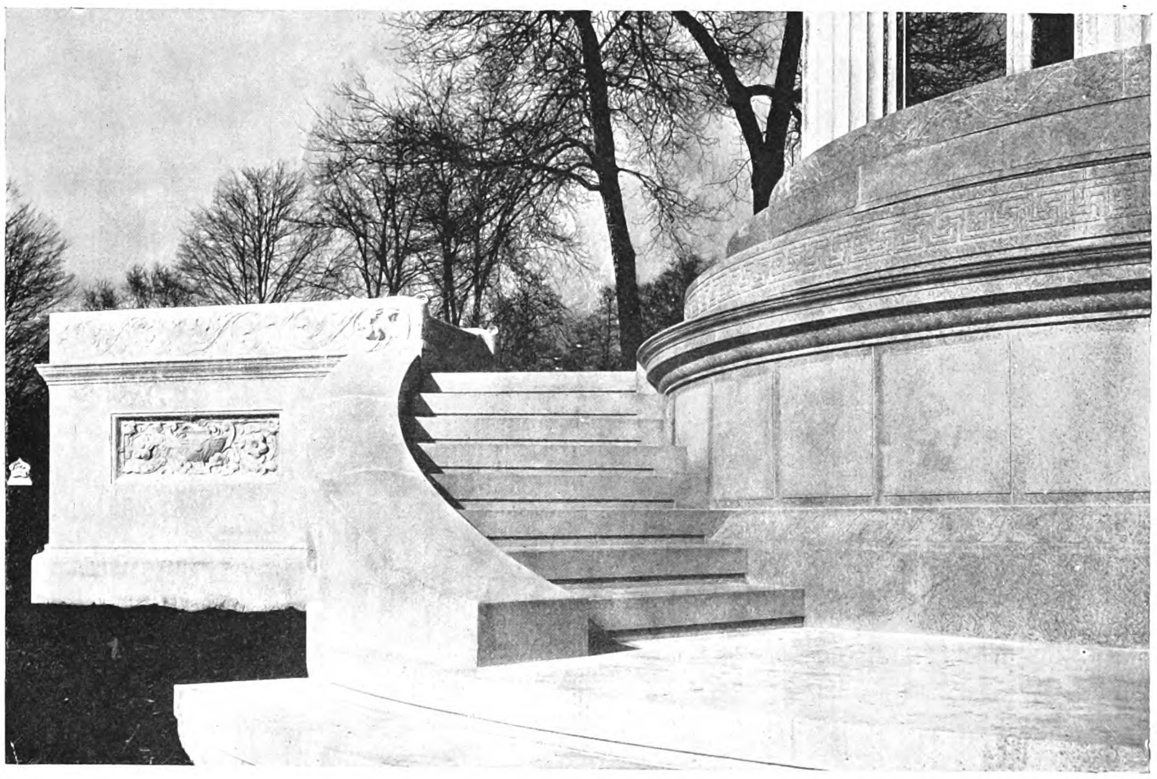
Egerton Swartwout, Architect.



Detail of Carved Panel on Base.



Detail of Carving on Return End of Base.



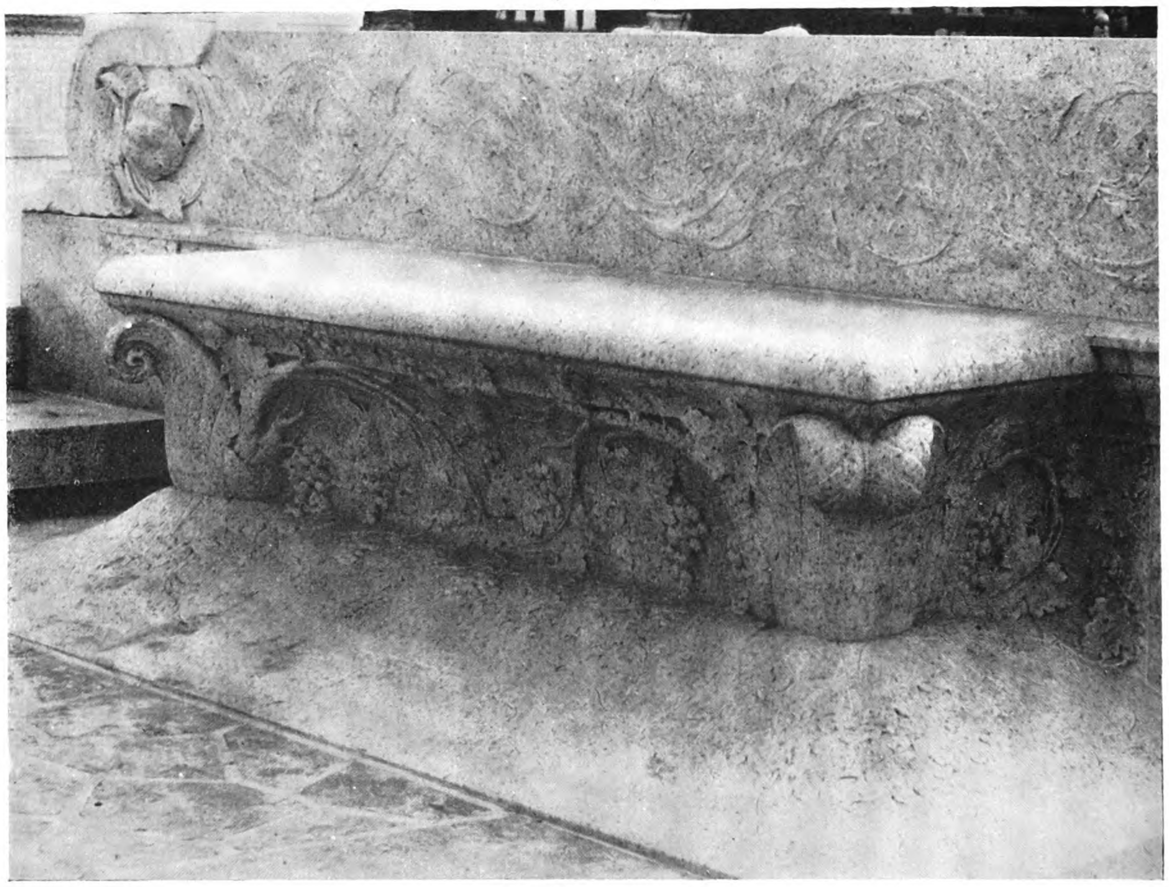
Detail of Base.

THE MARY BAKER EDDY MEMORIAL, MOUNT AUBURN CEMETERY, CAMBRIDGE, MASS.

Egerton Swartwout, Architect.

memorial itself. On the lake side there are, as already mentioned, the double flight of circular steps, flanked on each side by large pylons, on the top of which are inscriptions of white bronze, let into the surface of the granite. There is also an inscription on the top step of the stylobate, and a dedicatory inscription in the frieze of the entablature.

"I have been often asked," says Mr. Swartwout, "in what style the memorial was designed; was it Greek or Roman, or was it Ionic or Corinthian? and I have been forced to answer that it was none of these. It was Classic, I hoped, but yet it was modern. The columns and the caps have a certain resemblance to an order which was transitional between the Doric and the Corinthian, and is best known from its use in the little clepsydra of Andronicus Cyrrhestes, in Athens, sometimes called the Tower of the Winds. I do not mean to infer that the columns of the memorial are copies of, or are similar to, the order of the Tower of the Winds. They are merely of the same type. The entablature is not similar to any entablature that I know of; it is extremely simple, relying for its ornamentation on the exterior chiefly upon the carved cresting and the bronze inscription in the frieze, and on the interior upon the elaborate and effective frieze which is carved in high relief."



DETAIL OF CARVED SEAT ON BASE.

All that now remains to be done to complete the memorial is the planting for the landscape, which is to consist chiefly of some evergreen plants which will preserve their form and leaves throughout the year, and some cedars and rhododendrons.

Christian Scientists throughout the world contributed to the cost of the memorial, which was more than $150,000 (roughly, £30,000).

Mr. Swartwout's brief account of the genesis of the monument is not without some slight trace of psychological interest. It reveals—of course unintentionally—how scholarship influences the mind of the artist. To have produced so refined a monument as this without consciously copying some great model, whose form it nevertheless suggests, is to illustrate the law that the mind of the artist grows by what it feeds on. The architect who has thoroughly assimilated the Greek spirit has no need to copy the Greek masterpieces; he re-embodies it, and acts as the medium through which it assumes fresh shapes, expressing anew the essential elements of beauty—those few and simple though elusively subtle elements that the ancients discovered for all time. No man may add to them; and if he fail in reverence for them, or have but a dim perception of them, or an imperfect sympathy with them; or if, in his egotism or his vanity, he strains after originality; or if he is besotted with the spirit of modernity: then he will work in vain, for he is opposing to principles that are eternal and immutable the paltry pretensions, the whims and caprices, that are temporal, local, accidental. Surely it is never necessary to assert individuality, nor to give aggressive expression to "the spirit of the age." These things may be left to speak for themselves; and Mr. Swartwout, happy alike in his fellow artists and in his clients, has worked in the true spirit and with the right measure of restraint, yet with perfect freedom from mere slavery to tradition and precedent; and he has produced a monument that, while modestly expressive of time, place, and subject, and sufficiently revealing the temperament of the artist, is also stamped with the authentic seal of ancient nobility. Yet, while it is obviously of long descent in a legitimate line, it has a distinctive grace that is eloquent of its day and generation.

SMALL HOUSES AND COTTAGES AT ST. ALBANS.—II.

Illustrated by Photographs taken by Mr. W. R. L. Lowe and others.

(Concluded from p. 25, *No.* 249.)

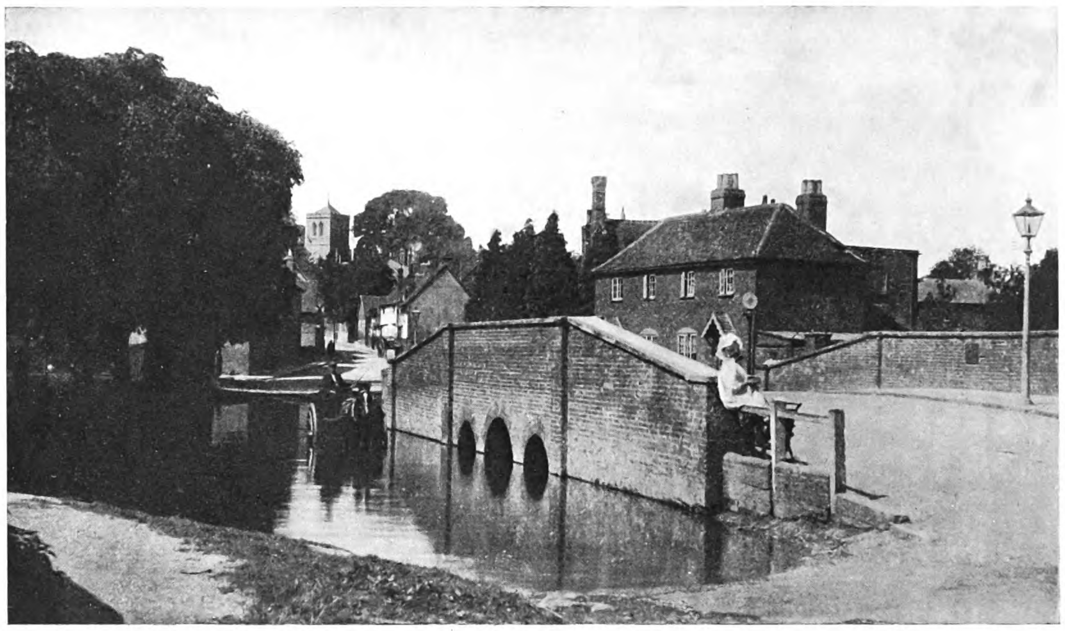


Fig. 14.—WATERSPLASH AND ST. MICHAEL'S VILLAGE.

THE charm of this assemblage of humble dwellings (houses in Fishpool Street: see August number, p. 25) inheres in their diversity of interest, which ranges from the proportion of the windows to the ingenuity and taste displayed in the bracketed door-pents, and even in the detail of the Norfolk latches and door-knockers. The student of architecture should note the absence of the gable placed parallel with the street. Such reticence is an object lesson in good taste, and goes far to disprove the theory of "set-square" architecture. St. Michael's village contains some admirable specimens of early eighteenth - century cottage building, including the Mill House and the pair of demure cottages above the bridge (see Fig. 14).

Farther along in Fishpool Street, adjoining Bank House, we encounter a group of four cottages which fitly epitomize the unwritten laws of proportion and composition. This group, as far as the elevational treatment is concerned, belongs to the third quarter of the eighteenth century (see Fig. 15). Adjacent to St. Peter's Church there is an interesting group which underwent addition at this period, but notwithstanding have a charm entirely their own (see Fig. 19). The same remarks apply with equal force to the range of cottages in Fishpool Street shown in the detailed photograph (Fig. 20). No. 38 St. Peter's Street belongs to a different category. It shows the costume of the 1780 period fitted with care to an older house, presumably because the owner wished to be in the fashion. This house-front is successful by reason of the faultless proportions of the windows, the contrast of the brick surfaces with the openings, and the magnificent foil to the latter provided by the entrance doorway (see Fig. 16). The double cottage, Nos. 52 and 54 St. Peter's Street, is noteworthy for the arrangement of the windows and doors, as well as for the employment of weather-boarding and timber-framing by the builder (Fig. 17). Additional evidence of the use of weather-boarding in timber-framing for cheap cottage building is forthcoming in the design of the cottages on the west side of Catherine Street (see Fig. 18). A typical brick cottage of early nineteenth-century date stands nearly opposite to the latter, the original doorway being obscured by a "rustic porch" of amateur construction (see Fig. 21).

One of the most pleasant ranges of cottage buildings occurs near the junction of Sandpit Lane with the Sandridge Road; in this the two extremes of the eighteenth century meet. The first cottage was built on an open site in

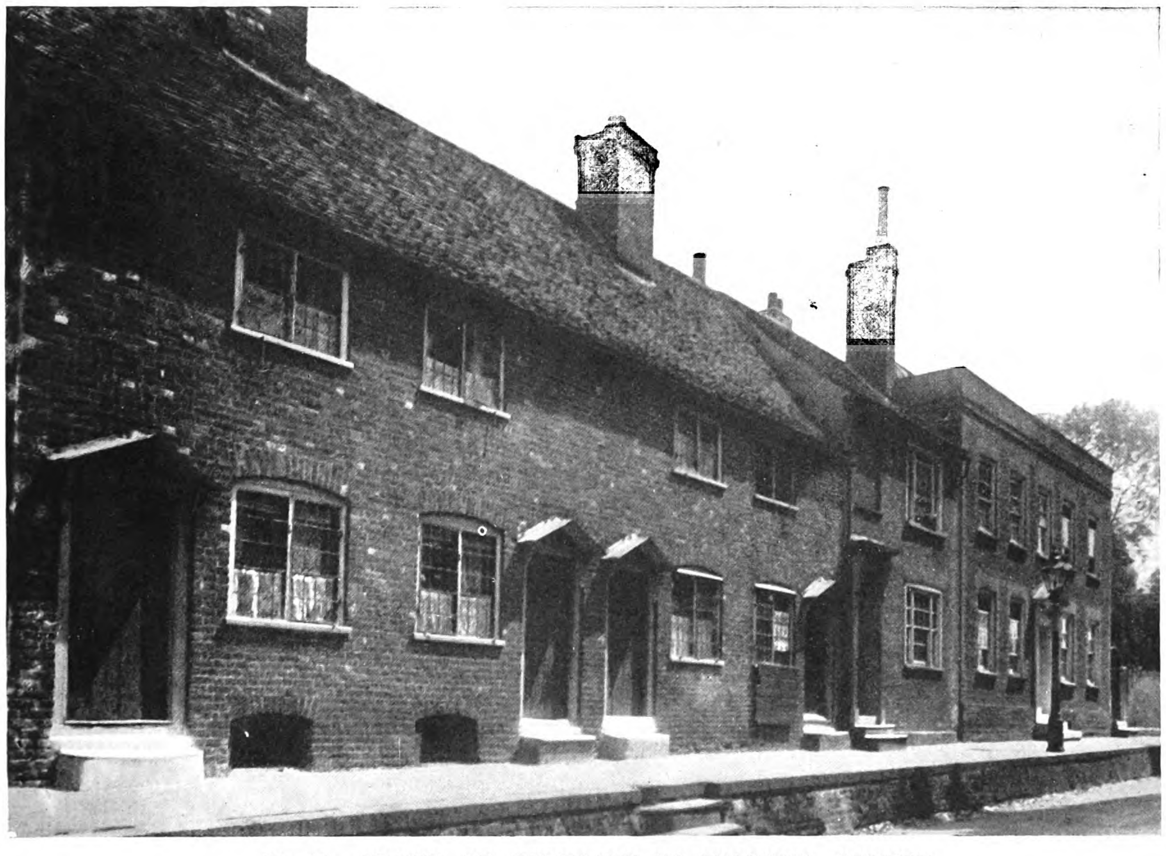


Fig. 15.—GROUP OF COTTAGES IN FISHPOOL STREET.

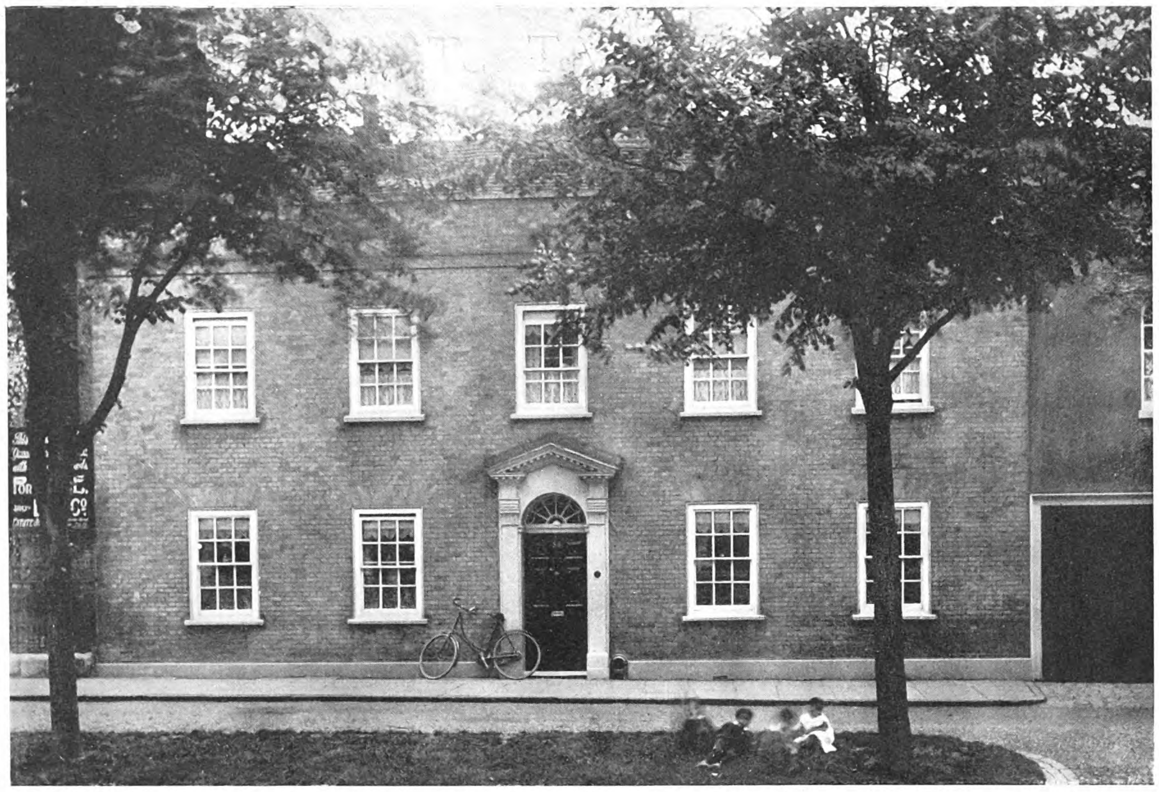


Fig. 16.—38 ST. PETER'S STREET.

the reign of Queen Anne. A hundred years later an enterprising carpenter ran up a group of four timber-built dwellings, which complemented the original brick cottage by continuing the eaves line direct. Simplicity and absence of architectural self-consciousness resulted in a whimsical grouping which is both pleasing and convincing (see Fig. 22).

As previously mentioned when the maps of St. Albans were under discussion, the opening years of the nineteenth century brought about renewed activity among the people of the town in the direction of building. The Napoleonic wars did not cause an abrupt stoppage of this important industry, such as we have seen during the present crisis. In 1804 a large addition was made to the Silk Mill in the form of a three-storeyed timber building roofed in gambrel fashion and finished with a diminutive bell-turret (see Fig. 23). Externally this building is unique, although entirely sympathetic in style to the types of mill of the period used for the production of paper in Hertfordshire and Kent. Another fine example can be seen at the side of the canal near Ware. Internally the timber framing is revealed, and the effect of the various floors when the silk is being wound recalls Longfellow's poem, "The Ropewalk." Such a building gains considerably from its placing, and the St. Albans Silk Mill in this regard is particularly happy in its umbrageous setting.

After the building of the Independent Chapel, in Spicer Street, in 1811, a new era of brick building occurred, varied with

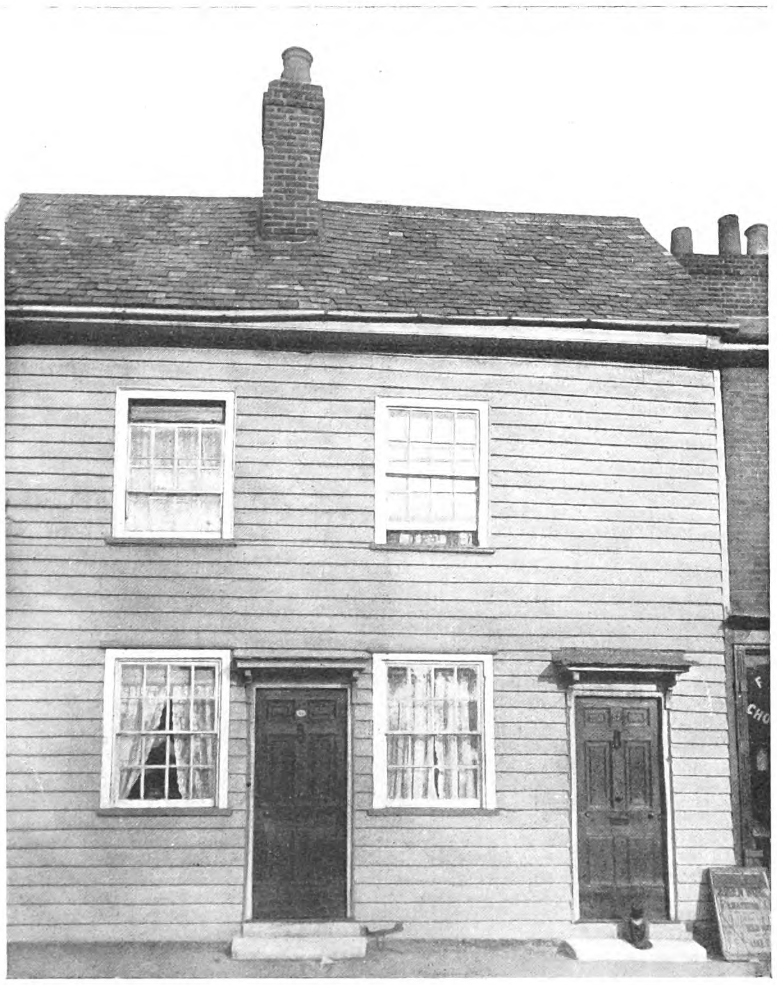


Fig. 17.—DOUBLE COTTAGE, 52 & 54 ST. PETER'S STREET.

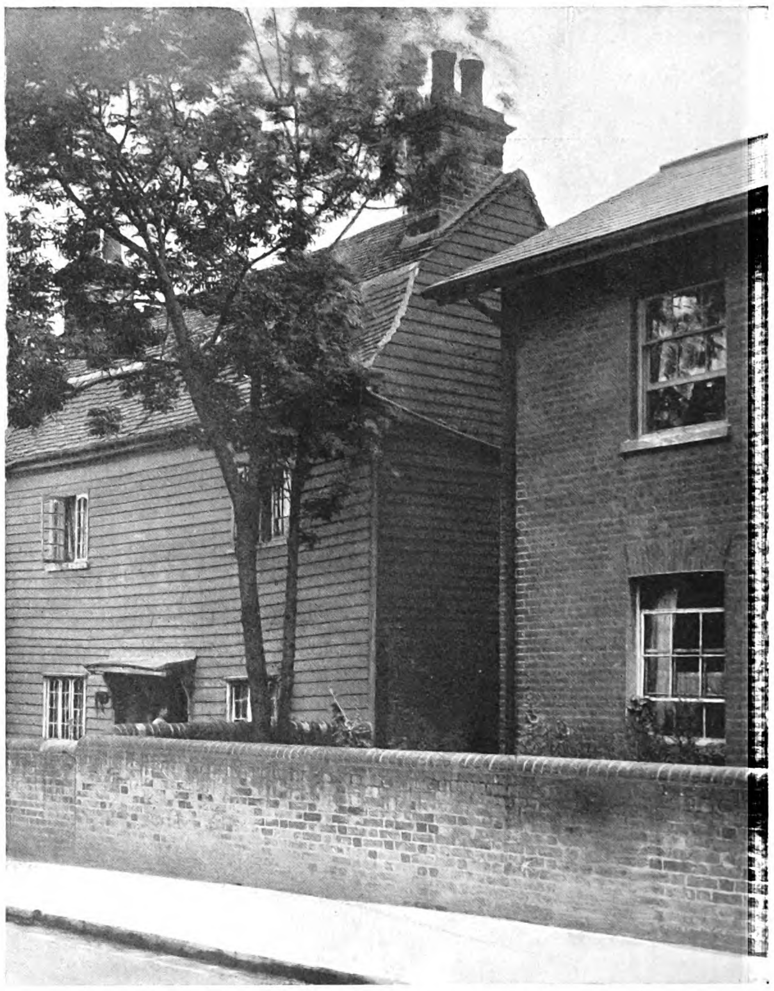


Fig. 18.—COTTAGES ON WEST SIDE OF CATHERINE STREET.

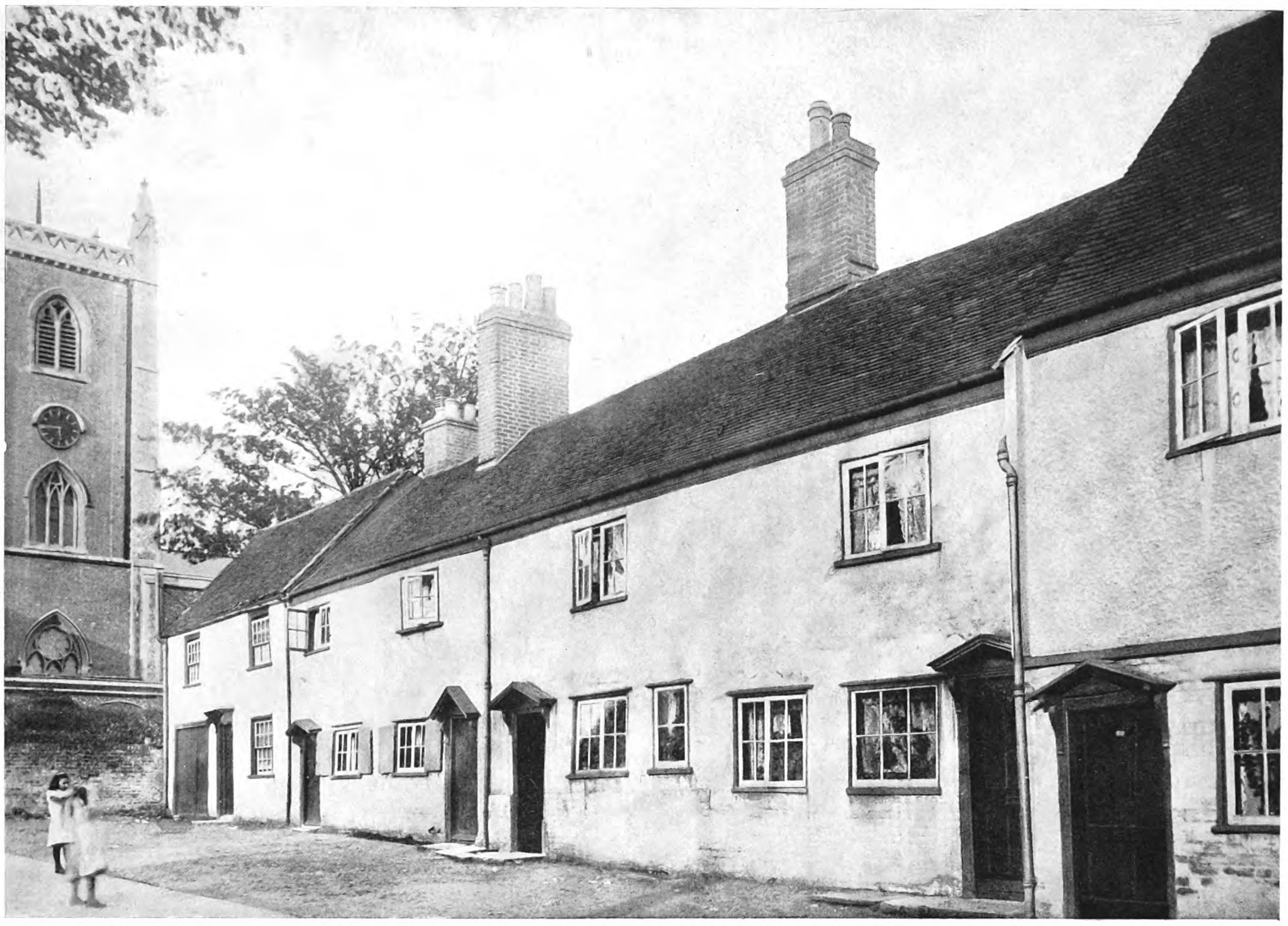


Fig. 19.—Cottages Adjacent to St. Peter's Church.

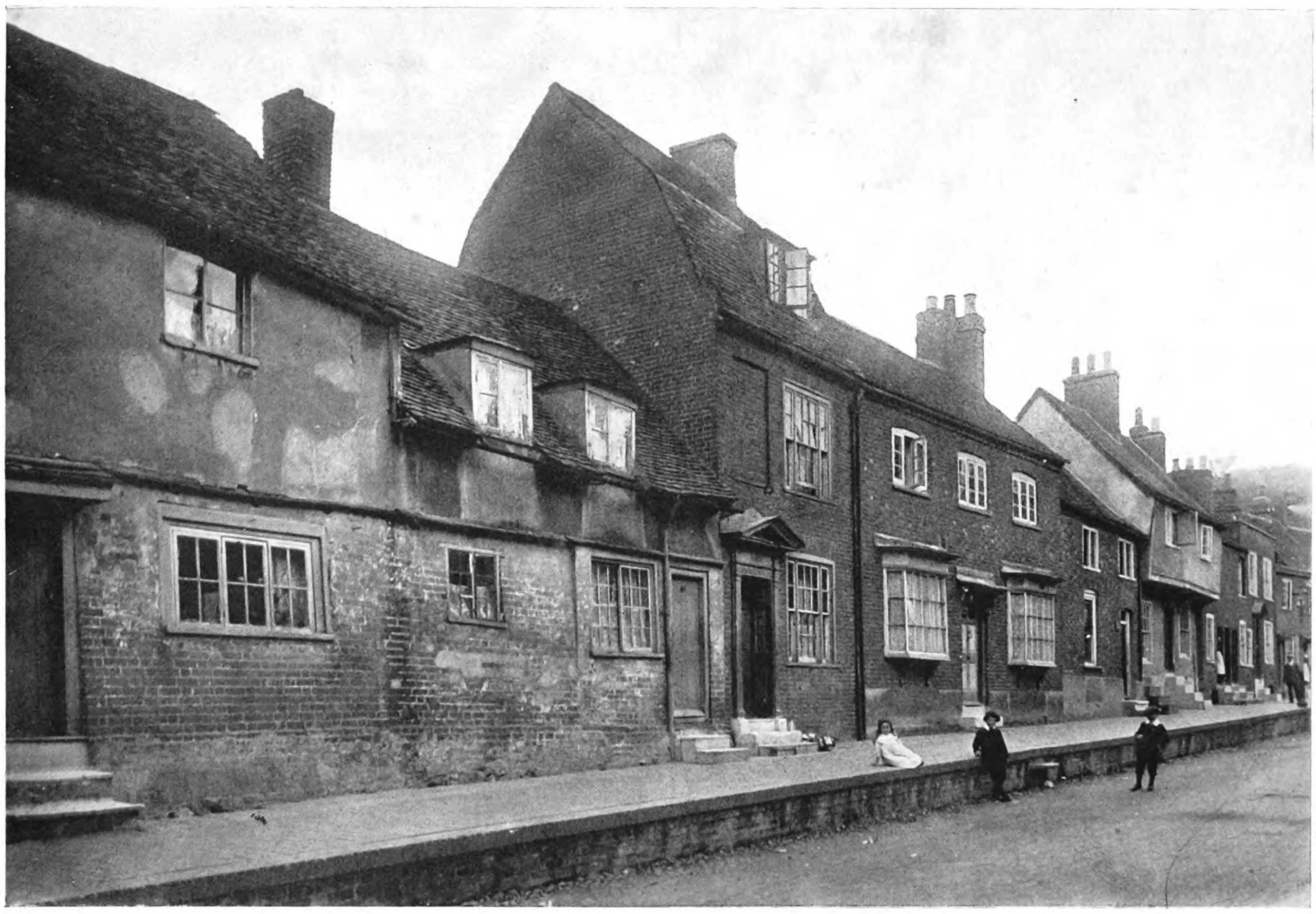


Plate II.

Fig. 20.—Cottages in Fishpool Street.

October 1917.

COTTAGES AT ST. ALBANS.

experiments in flint and stucco, which will be described. The range of six cottages known as Albion Terrace, in Dagnall Street, belongs to this period (see Fig. 24). In this pleasant group proportion plays a notable part; the treatment of the raised parapet is good, as it affords scope for a name tablet, and the outside frames to the windows, recurring at such a late date, should be noted as evidence of the respect paid by the builder to local tradition. Sportsman's Hall, built in 1815 (see Fig. 25), is typical of many cottages on the outskirts of the city, both in the direction of Harpenden, at Camp, on the Watford Road, and in Park Street.

The development of building in the city on traditional lines reached its zenith about the year 1829, when George Smith, a London architect, was commissioned to design the Town Hall, to take the place of the old Moot Hall, which was found inconvenient. A Lambeth firm of builders secured the contract for this work, and it is probable, although no direct evidence is available, that they undertook the erection of the numerous villas then projected beyond the centre of the town, both in the direction of Redbourn and towards London. The influence of an architect of taste is apparent in the detail of these houses; no ordinary builder could have achieved such results or have worked out the details with such consistency as is shown. George Smith stamped his personality on the Classic façade and interior of the Town Hall; he had a passion for two-panelled doors and Greek detail which he communicated to cornices and fireplaces with consummate skill. The people needed houses which should be convenient and larger than cottages; Telford's improvements had effected a considerable change in the internal communications of the town, and local residents desired to rent villas outside the business centre, yet at the same time in touch with the interest of the shops and the coaching traffic. From a study of the houses of the period it is reasonable to assume that the architect of the Town Hall made designs for the enterprising builder who saw what was needed. A start was made with the range of villas on the site of the yard of the old "Cross Keys" (these houses were illustrated in THE ARCHITECTURAL REVIEW for August 1912). Then followed the stuccoed villas on the west side of the Redbourn Road, and other houses in the new London Road, after which the Flint houses are perhaps the most interesting.

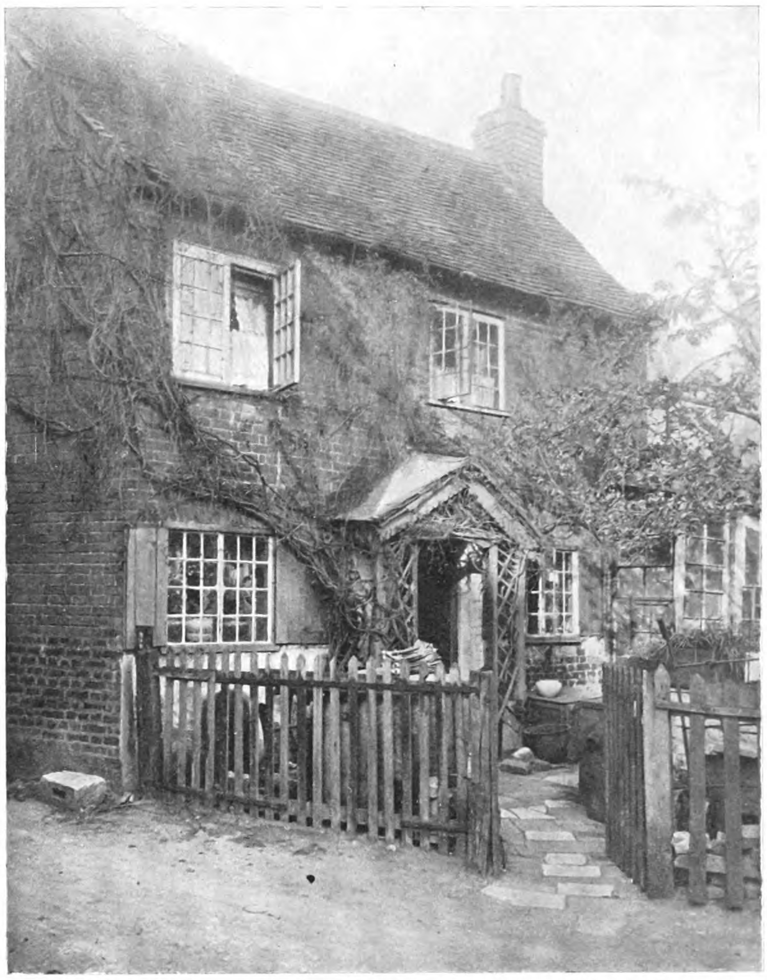


Fig. 21.—BRICK COTTAGE, CATHERINE STREET.

In the design of the latter an attempt is made to reconcile the fashion of George IV with the earlier traditions of St. Albans. In 1829, when the flint houses were built, with the exception of the neighbouring London Terrace the aspect was open, and these houses, with others of white painted stucco on the same side of the way, formed the outposts of the city in a southerly direction. Smith had been a pupil in the office of Robert Furze Brettingham, and was familiar with eighteenth-century methods. There was a convenient quarry of flint for the builders in the ruins of the neighbouring Sopwell House, and it only remained for the architect to devise a treatment whereby the flints could be incorporated with brickwork to secure a pleasant effect. The flint houses are thoroughly sympathetic with the late Georgian period; in every respect they represent the last flicker of domestic

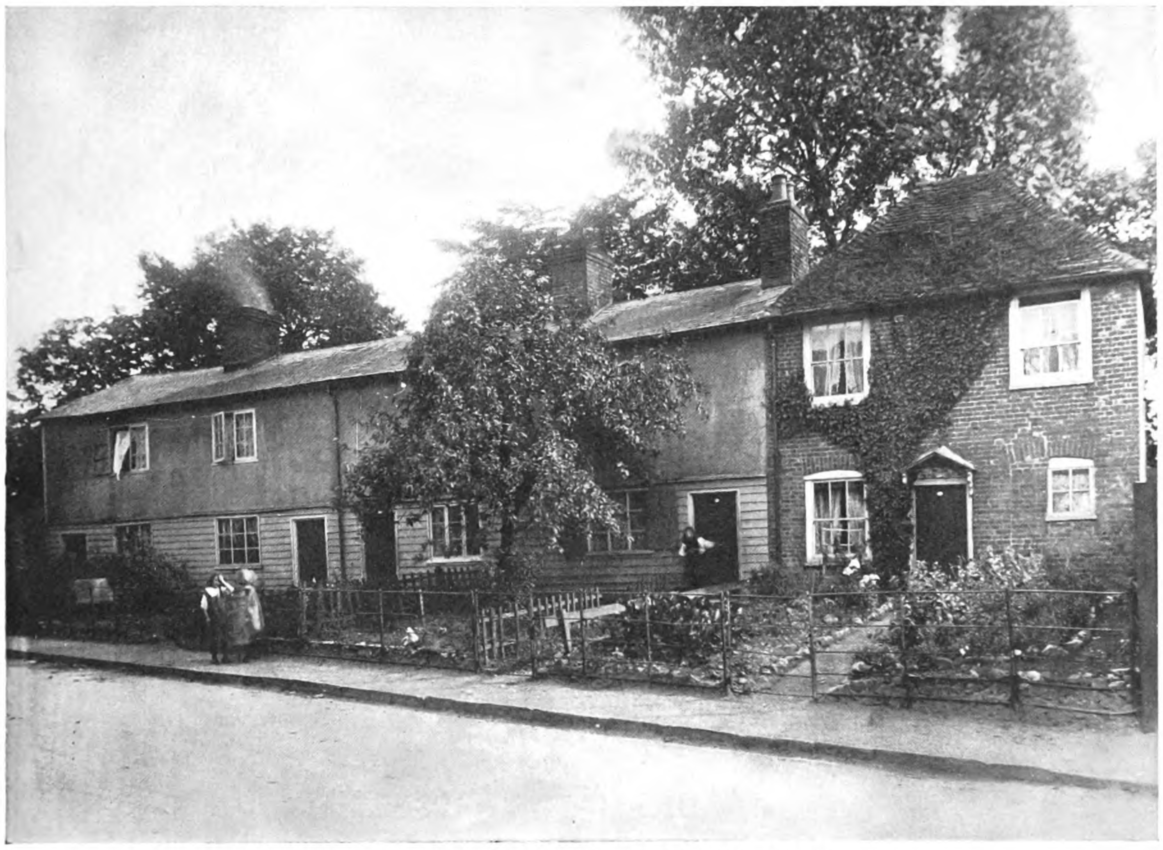


Fig. 22.—COTTAGES IN SANDRIDGE ROAD.

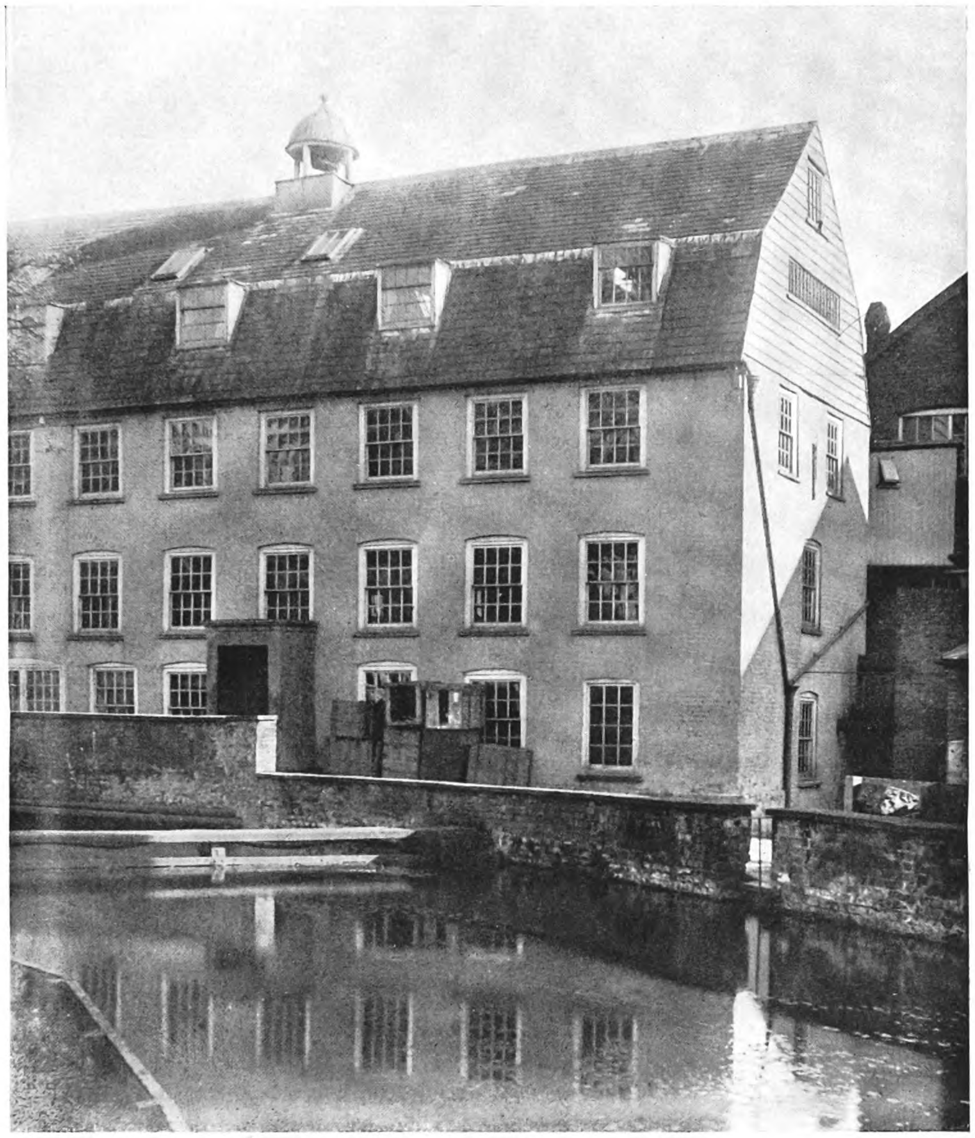


Fig. 23.—THE SILK MILL.

tradition before the architects, headed by Loudon, turned their attention to the reproduction of stodgy villas of quasi-Italian design. The plan of these semi-detached villas is well thought out; they have oak staircases of geometrical form, two-panelled doors, respectable fireplaces, and diminutive stables, and were evidently designed to catch the eye of passengers on the coaches. The rate-books show that these houses were purchased by a local farmer, who occupied one and let the other (see Fig. 26). Two smaller villas of similar plan were built at this period in Spicer Street. They show distinction of the same stamp (Fig. 27).

The design of the Marlborough Arms, at the foot of Holywell Hill, although from an architectural standpoint unassuming, should be noted as an example of the reticent taste of the period (see Fig. 30). In 1837 various improvements were made in the direction of the roads entering St. Peter's Street, such as the widening of the Hatfield Road. This necessitated the refronting of the houses, and here again the respect accorded to traditional methods should be noted, for almost invariably the builders had recourse to outside frames for the windows, and they evolved some very interesting and refined pents over the doorways. The brick cottages in Waddington Road and Russell House in St. Peter's Street coincide with the accession of Queen Victoria. Opposite Kingsbury Farm, in St. Michael's village, there is a square cottage, bearing the date 1831, which is both effective and original (see Fig. 28); and another example of the late period is the diminutive house in Fishpool Street, in which a low-fronted shop emphasizes the purpose for which the building was intended and is still used, namely, a builder's office (see Fig. 32).

Before bringing this article to a close, the Marlborough Buildings, or Almshouses, in the Hatfield Road, remain to be described; for, although the original formation has been retained, together with the interior details, the outside underwent a complete transformation at the middle of the last century. The almshouses were erected in the year 1735 by Sarah, Dowager Duchess of Marlborough, the youngest daughter of Richard Jennings, of Sandridge. It appears that the termagant Duchess purchased of her two sisters their share of the paternal estate, and acquired from the heirs of the Robotham family the Manor of Newland Squillers, within the parish of St. Peter, of which the manor-house stood at the extremity of the borough by the side of the road leading to Hatfield and Hertford. It is shown by traditional accounts that the house at that time had long been abandoned by the family, and had been let as a boys' boarding school for the Dissenters. The Duchess pulled down the house, and erected the present buildings on the

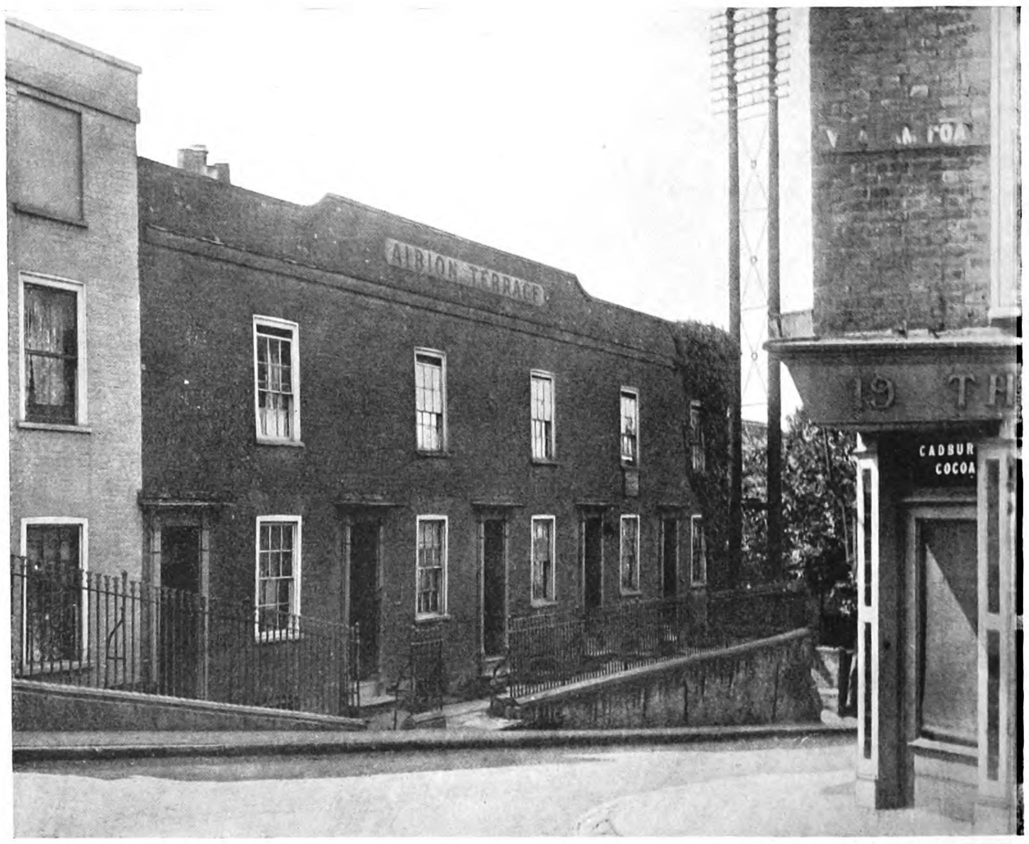


Fig. 24.—ALBION TERRACE, DAGNALL STREET.

site, which buildings and the grounds to the same, together with certain estates in Crowhurst and other places in the counties of Surrey, Sussex, and Kent, formerly the property of Edward Gibbon, one of the South-Sea directors, and several other estates in the county of Warwick, formerly the property of Robert Surman, deputy cashier of the South-Sea Company, the Duchess by deed of Chancery, dated 2 June 1736, conveyed to Daniel, Earl of Winchilsea and Nottingham, the Right Hon. Sir Thomas Reeve, Chief Justice of the Common Pleas, and others, in trust, for the maintenance of the almsmen and almswomen, but subject to the sole management of the Duchess during her life. She also directed that £20 per annum should be paid to the rector of the Abbey Church, or to the vicar of the parish church of St. Peter, for attending the inmates of the buildings.

These almshouses are divided into nine separate houses, forming three sides of an oblong. Each house has comfortable apartments for four persons, and a detached garden. There is in addition an annual allowance of money and coals. As previously mentioned, the interiors of the houses, with the plain oak staircases, are practically as they were when built; but the exterior, although retaining the lines of the older structure, took on a new character when the repairs were effected in 1850. As it happened, the alterations were carried out with skill and, when the period is considered, good taste, although it is to be regretted that the original treatment has been lost (see Figs. 29 and 31).

Such are the attributes of the minor buildings of St. Albans, evolved by architects and unknown builders during two hundred years of the city's history. The charm of the façades is apparent in the simple proportioning. There is no pinched pretension to fashion, no architectural finery to tarnish and moulder away, but an honest and almost subconscious attempt to explain the conditions determining the lives and social status of every class of the community. The architectural interest of these buildings is nevertheless great. They have a character entirely their own, yet one closely allied to the tradition of the home counties. The peaceful life of old St. Albans hovers over these boxes of brick, flint, and timber, standing demurely in marked contrast to the garish modern villas which disfigure the recent growth of the city. Some of the houses are more "genteel" than others; but all, without exception, have that air of restraint peculiar to the past, and exhibit with pride their enriched doorways and chased brass knockers. If the designers of garden cities took the trouble to study the cottages in Fishpool Street and other parts of St. Albans, they would learn much to their advantage. They might be brought to understand that the

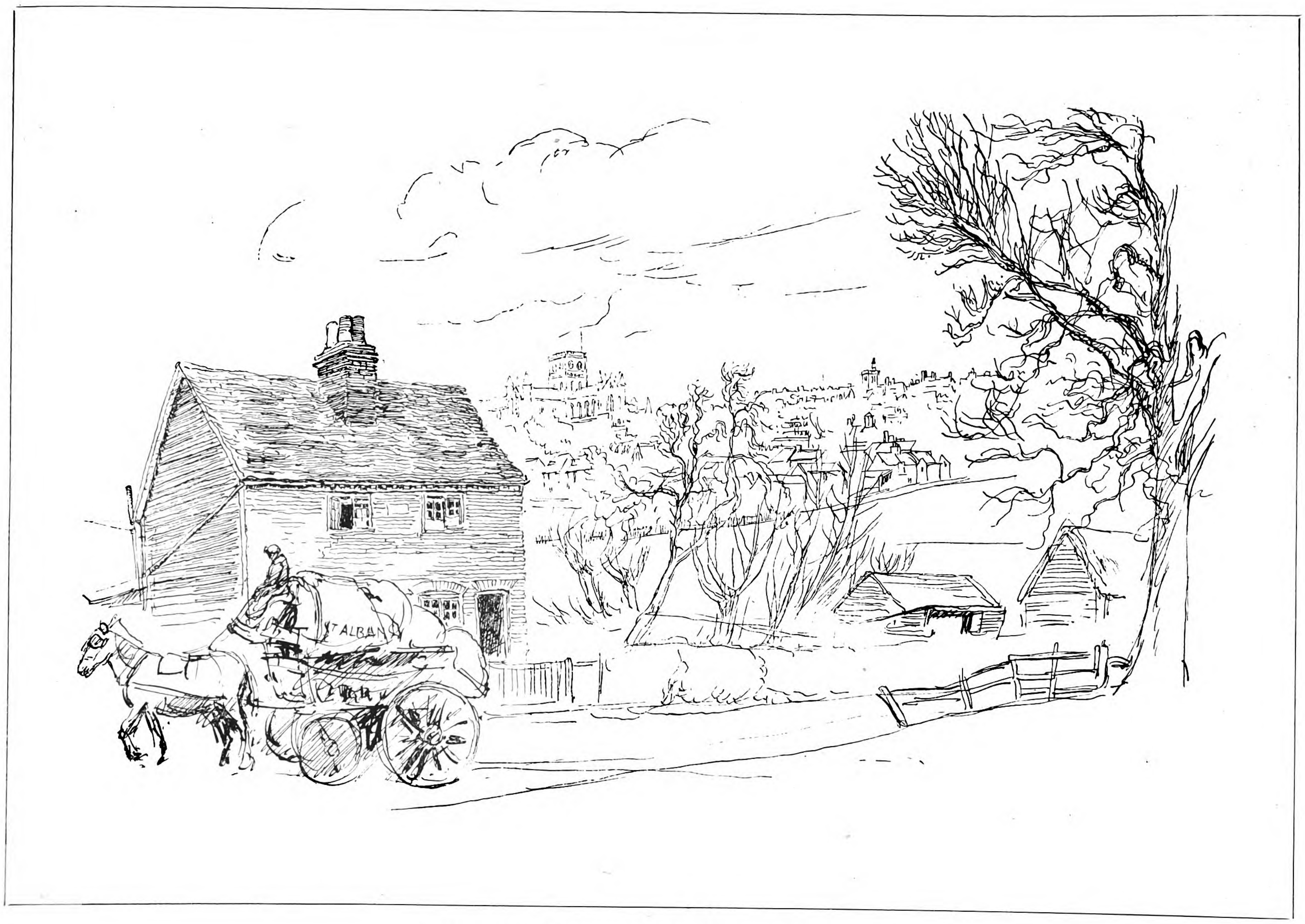


Fig. 25.—SPORTSMAN'S HALL, ST. ALBANS (1815).

From the Sketch by Hanslip Fletcher.

gabled front is not always an architectural *sine qua non*, and that good proportion is above all things the one attribute that tells. Houses are curiously like individuals—their idiosyncrasies improve with acquaintance. Twenty years ago cottages of the type illustrated would have been passed over by architectural critics; but to-day, with the problem of economic building facing the Government, such charming examples of the past cannot be ignored.

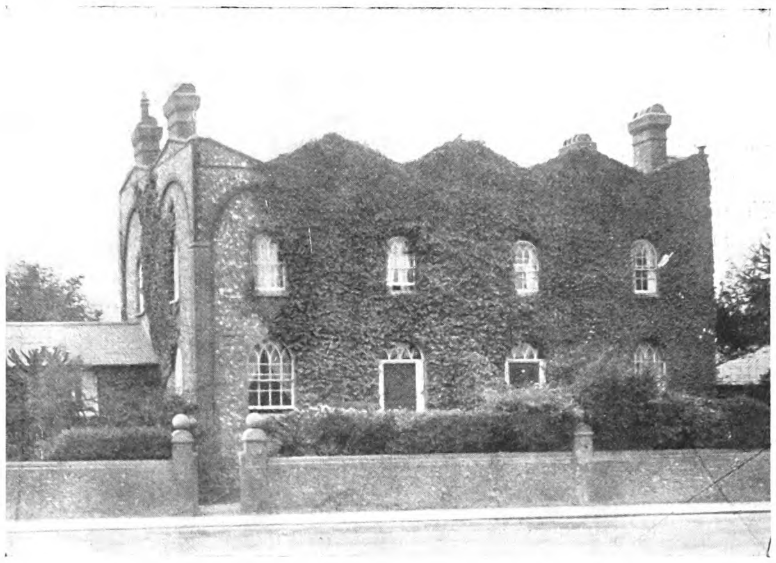


Fig. 26.—FLINT HOUSES, LONDON ROAD, ST. ALBANS.

The charm and sweetness which constitute the character of the typical old English country town are mainly attributable to the sound common sense displayed in the sympathetic grouping of the buildings, and also in the respect accorded to the preservation of natural beauties. As we have seen, these qualities are plainly apparent in St. Albans. Gradually, through the centuries, houses have been merged with fields and standing trees, the whole forming a most delightful *ensemble*, leafy screens separating street from street, yet co-ordinating the whole. This, it seems, is the kind of model to follow in the arrangement of garden cities—no mere desecration of the countryside, no abrupt junction between town and country, but a gradual and barely perceptible fusion of convention with nature.

Recent legislation has led to the exploitation of these natural oases; corduroy roads have been formed, and the speculative builder has been allowed to work his will, with detriment to the amenities of the city. It was with the advent of the London and North-Western Railway in 1856, followed by the Great Northern enterprise, and later in 1869 by the Midland Railway, that what may be termed the modern development began, and this part of the city's history makes little appeal to the artistic mind. But, in spite of all the depredations of modern times, St. Albans still retains much of its old-world charm. The very atmosphere is redolent of ancient history.

And dominating the whole, and giving the key-note to the city, we still have Paul de Caen's majestic Norman tower, harmonizing by its mass the heterogeneous collection of roofs and imparting to the clustering buildings a moiety of its own warmth.

A. E. Richardson.

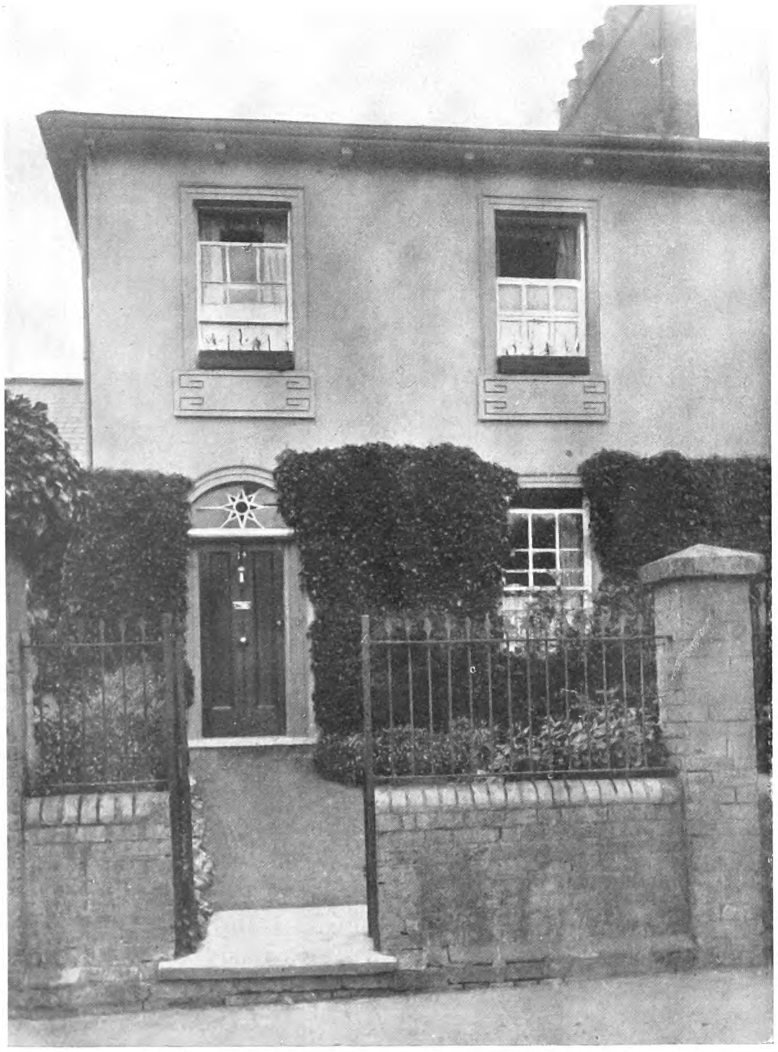


Fig. 27.—VILLAS IN SPICER STREET.

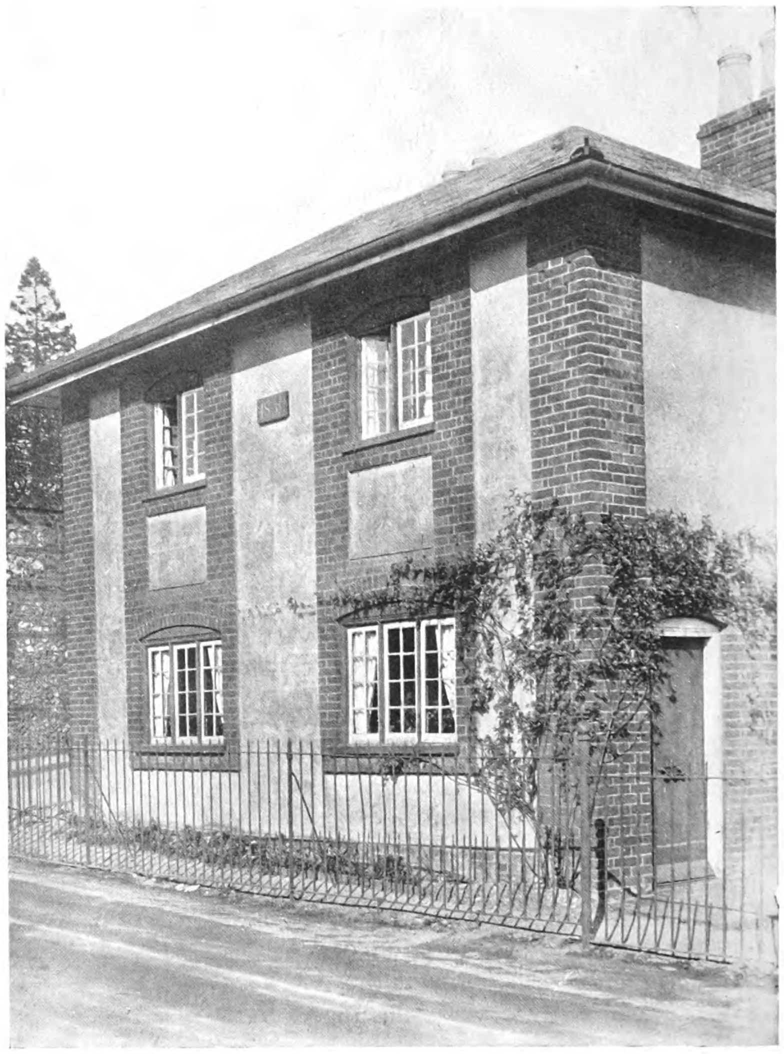


Fig. 28.—COTTAGE IN ST. MICHAEL'S VILLAGE.

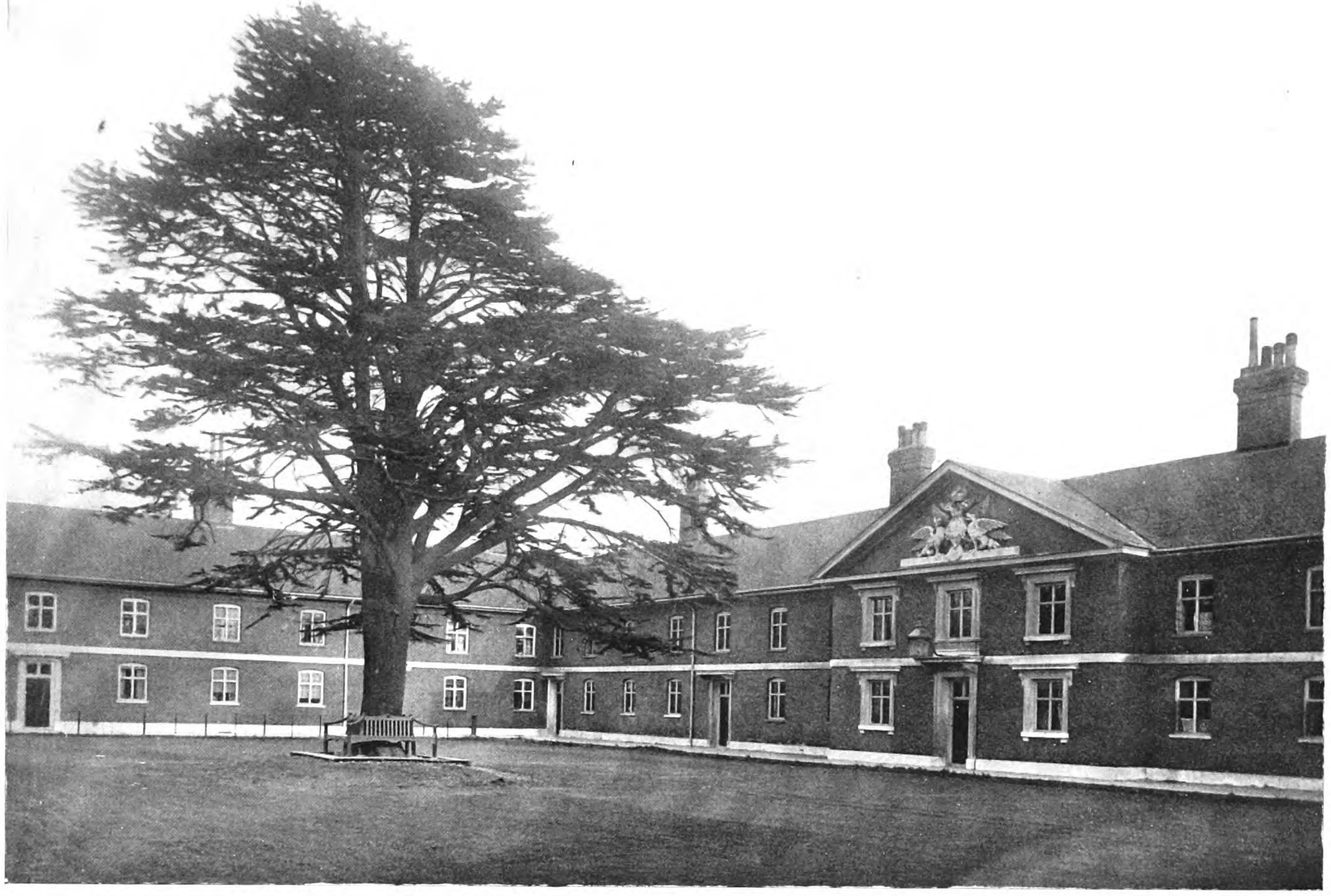


Fig. 29.—The Marlborough Almshouses, St. Albans.

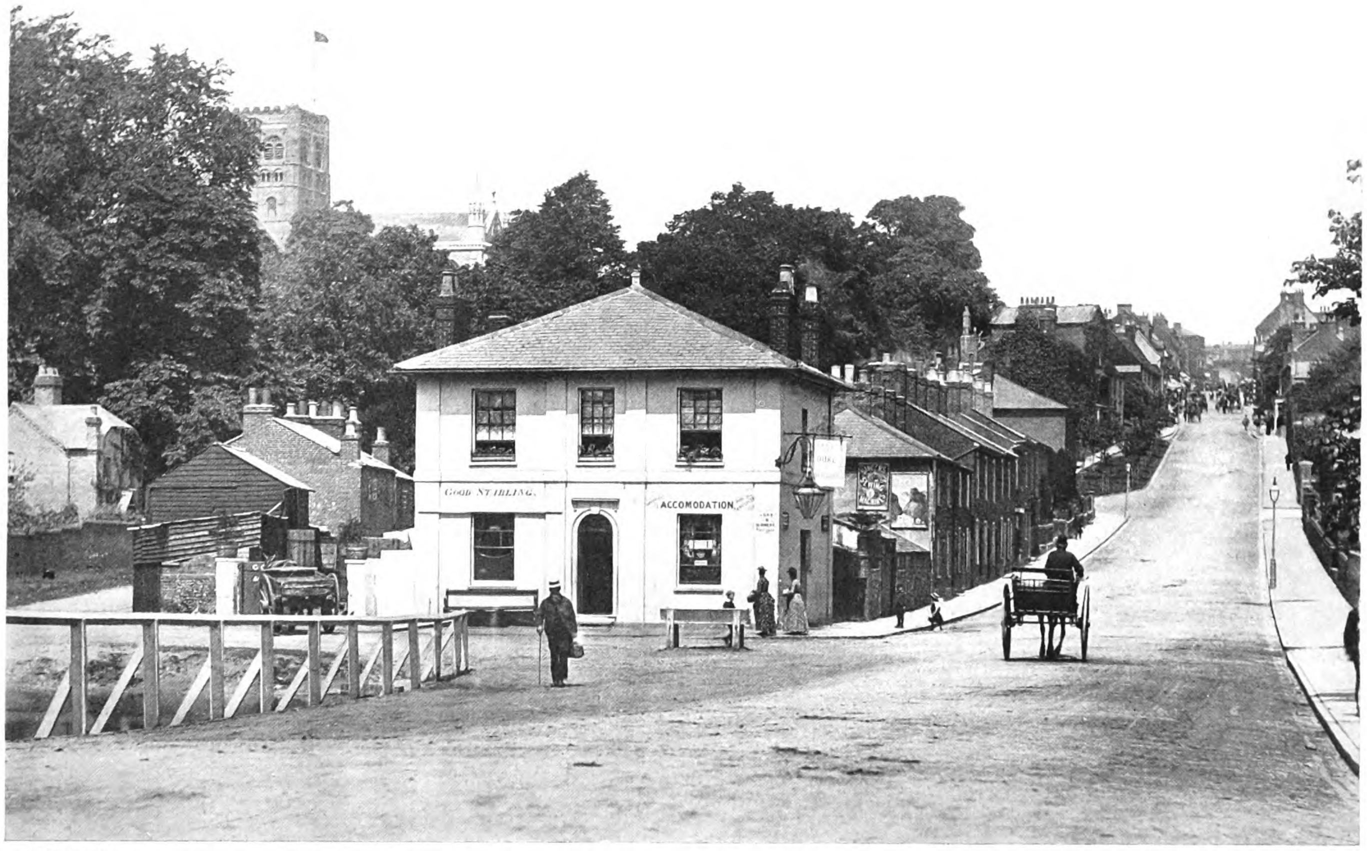


Plate III.

October 1917.

Fig. 30.—The Marlborough Arms, Holywell Hill.

BUILDINGS IN ST. ALBANS.

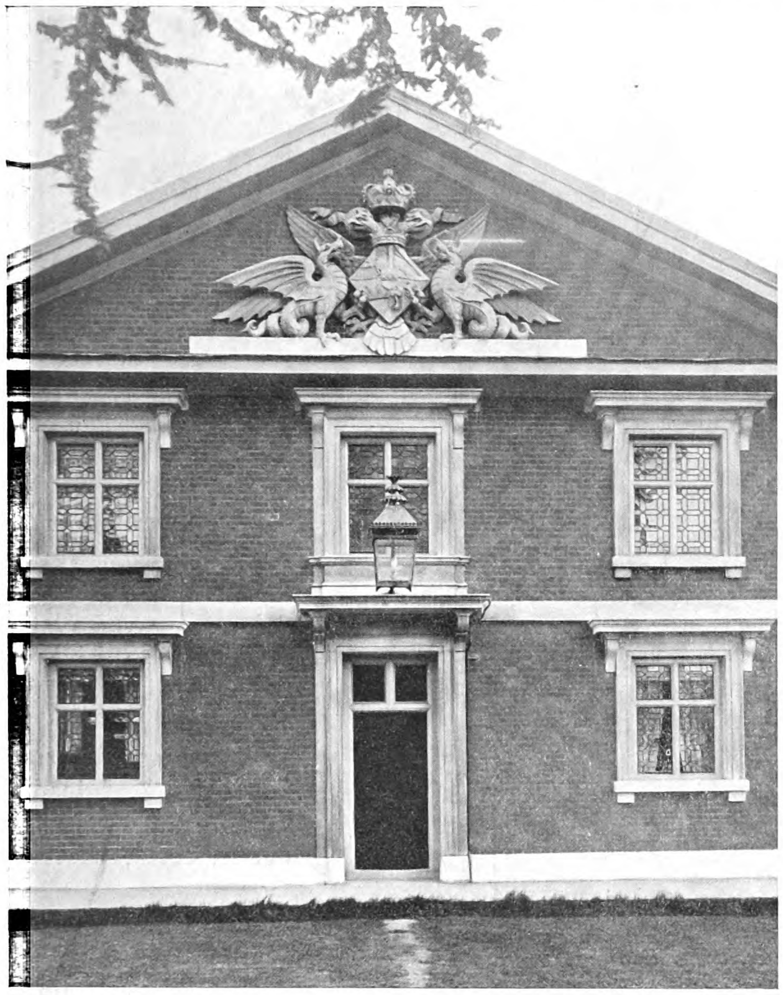


Fig. 31.—MARLBOROUGH ALMSHOUSES: DETAIL OF ENTRANCE.

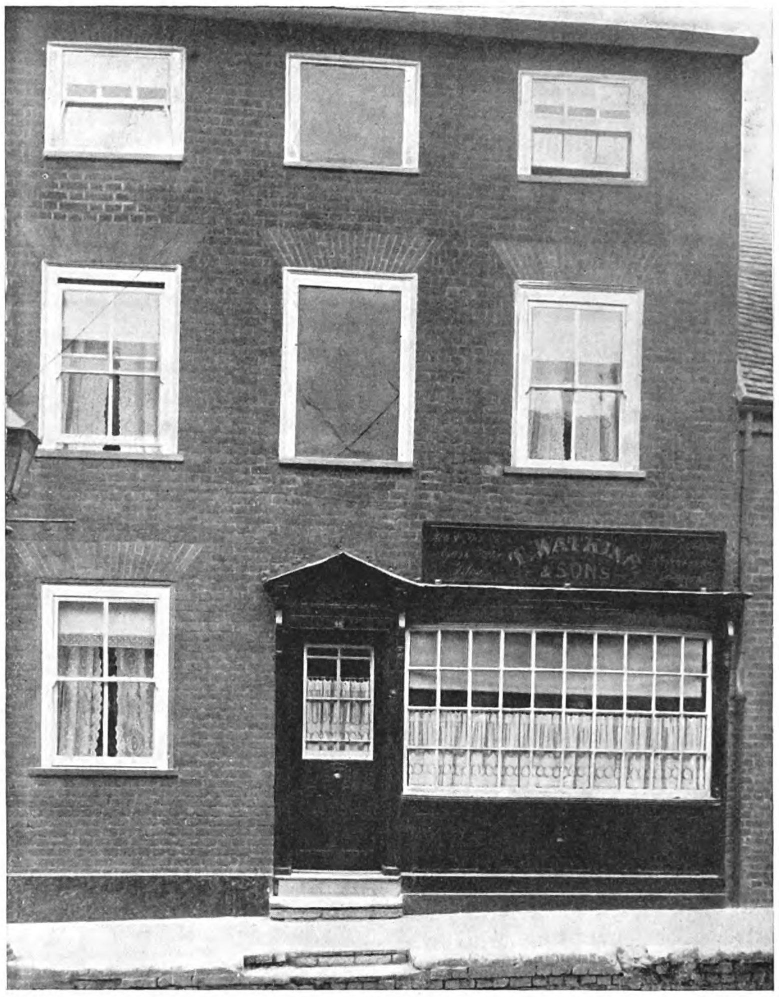


Fig. 32.—HOUSE IN FISHPOOL STREET.

SIR T. G. JACKSON'S SALONIKA MEMORIES.

In the course of an interesting letter to "The Times," Sir Thomas Graham Jackson, R.A., who, it will be remembered, has travelled much in the Balkan States, writes :—

"My knowledge of the place goes back not only before the fire, but before the Balkan Wars, when the Young Turks were in the first flush of victory, and were being hailed as the apostles of a new and regenerated Turkey. That was a happy time for students of architecture and antiquity, both at Salonika and Constantinople. One could wander about with sketch-book and camp-stool where one pleased: no one shouted 'Shaitan,' and if an occasional stone was thrown the Turks assured one the hidden culprit must have been a Greek. Probably at no time was access to the ancient monuments of the country so easy as during that happy time, all too brief. At Salonika East and West meet. Along the sea front, whence you look out upon the Thessalian Olympus, are hotels and modern houses, warehouses and magazines, in the uninteresting style of European civilization. Behind is the old town piled up on the steep hillside, full of the mystery of the Moslem world. A good wide street runs through it from end to end, spanned by an arch resting on piers covered with late Roman sculpture; but little or nothing remains of ancient Thessalonica on which the eye of the great Apostle of the Gentiles could have rested. Round the back of the town the Venetian walls still run, starting originally from the White Tower on the shore at the east end, though they do not now reach it. At the west end of the main street was a fine gateway largely composed of fragments of ancient buildings; but it was pulled down, within a month after I had sketched it, by the Young Turk in the fervour of his newly awakened zeal for progress and enlightenment, in order that a tramway might run over its site. At every turn one came upon old Byzantine churches turned into mosques. St. Sophia, then in process of restoration after a fire, was the most ancient cathedral. It has some of the most lovely mosaics I have ever seen, and capitals, imported no doubt from Proconnesus, of the purest Byzantine delicacy. Still finer are, or were, those of St. Demetrius, that splendid basilica whose destruction by the late fire makes an irreparable gap in the history of the style. We are told only the bare walls remain; walls, when I saw them, lined throughout with lovely marbles and priceless mosaics. The splendour of the interior almost passed belief. The round church of St. George, reminiscent of the Pantheon at Rome, has mosaics in the dome with a circumference of seventy-two yards. The mosque of Eski Djuma, whose Christian dedication is forgotten, is a superb basilica with marble columns and delicate Byzantine capitals, supporting arches to which mosaic still clings, though, as I sat to draw, tesseræ of gold, sapphire, and ruby every now and then fell with a gentle patter on the ground. High up on the hillside is the church of St. Elias, who, like St. Michael, was always honoured on the site nearest to heaven; and in another part of the town is the Dodec-Apostol, or Souk-su (cold water) mosque; both of them churches in a later style, with fancy brickwork arranged in the walls with patterns of fret, vankykes, guilloches, and circles; a kind of ornamentation imitated in the Serbian churches of the fourteenth and fifteenth centuries."

THE LINCOLN MEMORIAL CONTROVERSY.

A SLIGHT contretemps has arisen with respect to the statue of Abraham Lincoln for which our Government has offered a site near Westminster Abbey. The circumstances are set forth in the following extracts from various communications which have appeared in "The Times." Cabling on 22 September, the Washington correspondent of our contemporary alleged that "Much concern and no little indignation were felt in the highest circles at the news that Barnard's statue of Abraham Lincoln was actually cast and ready for shipment to England, to be erected opposite the entrance to the House of Lords." He cites objections to the Barnard statue by the late Mr. Choate, Senator Lodge, and the late Mr. Robert Lincoln, son of Abraham Lincoln. The last-named gentleman expressed himself very strongly against the Barnard statue; adding: "I should, of course, have filial pride in having a good statue of my father in London or Paris, but that my father should be represented in these two great cities by a work such as that of which I am writing to you would be a cause of sorrow to me personally."

On the other hand, there is evidence that many competent judges have expressed great admiration for the Barnard statue as a work of art; and the position is explained by the honorary secretary of the British-American Peace Centenary Committee, who writes as follows to "The Times":—

"The statue of Lincoln which was originally presented about three years ago to the British-American Peace Centenary Committee by the American Committee was a replica of the superb work of the great sculptor Augustus St. Gaudens, which is universally acknowledged to be the finest memorial in stone of the great American. (This is illustrated on the opposite plate.) A site was found for it by the Office of Works facing Westminster Abbey, and it is the hope of the committee to be able to erect it on that site after the War.

"It was only recently that the committee was offered the second statue on behalf of Mr. Charles P. Taft, and while we did not decline the gift, we did not accept it in substitution for the St. Gaudens statue, although the Office of Works was ready to place the Westminster site at our disposal. At the last meeting of our committee, held in July last, a cablegram was sent to the chairman of the American Committee begging him not to ship the Barnard statue during the War. The relative merits of the statues have been inquired into and discussed by our committee, who were naturally influenced by the views expressed by Robert Lincoln, the late Mr. Choate, and others who knew Lincoln well. Our secretary is now on a mission to the United States, and will clear up any misunderstandings which may have arisen with regard to the offer of the second statue."

"The Times" is informed that the First Commissioner of Works and his advisers are of opinion that, inasmuch as the Lincoln statue was a gift from the American Centenary Committee, it was impossible for them to refuse it merely on account of a wide divergence of opinion as to its merits, such as generally exists in connexion with any important work of art. The question of site would, of course, be reconsidered, as it was originally chosen for the St. Gaudens replica, but it is not possible to say whether this can be done until the statue has been seen and its suitability considered.

"The first offer of a statue of President Lincoln was made on 14 February 1914, by Lord Weardale, chairman of the Executive Committee of the British Branch of the International Committee formed to celebrate the Hundred Years' Peace between Great Britain and the United States. The offer was made to the British Government on behalf of the American Committee, the donor being Mr. Charles P. Taft, a well-known art lover, possessing one of the finest art collections in the States. The matter was placed before the Cabinet, who gladly accepted the offer made on behalf of the American Committee.

"On 14 March of the same year Mr. A. Shirley Benn, M.P., joint acting secretary with Mr. Robert Donald to the British Committee, asked in the House of Commons whether the Government would grant a site for the statue at the south-east corner of the Canning enclosure, facing the Abbey. The reply was to the effect that the suggested site was being favourably considered. Later an offer was made of the site, which was accepted very gratefully by the committee as being admirably adapted to the purpose.

"Nothing more was heard of the matter until March of this year, when His Majesty's Office of Works received a letter from Mr. Robert Donald, on behalf of the committee, showing what progress had been made with the project. It was first thought that the statue would be a replica of one by Augustus St. Gaudens, but later the committee were informed that the statue by Barnard was, in the opinion of leading art critics in the States, much superior, and that a casting of it had been ordered, and would, it was expected, be ready in July of this year.

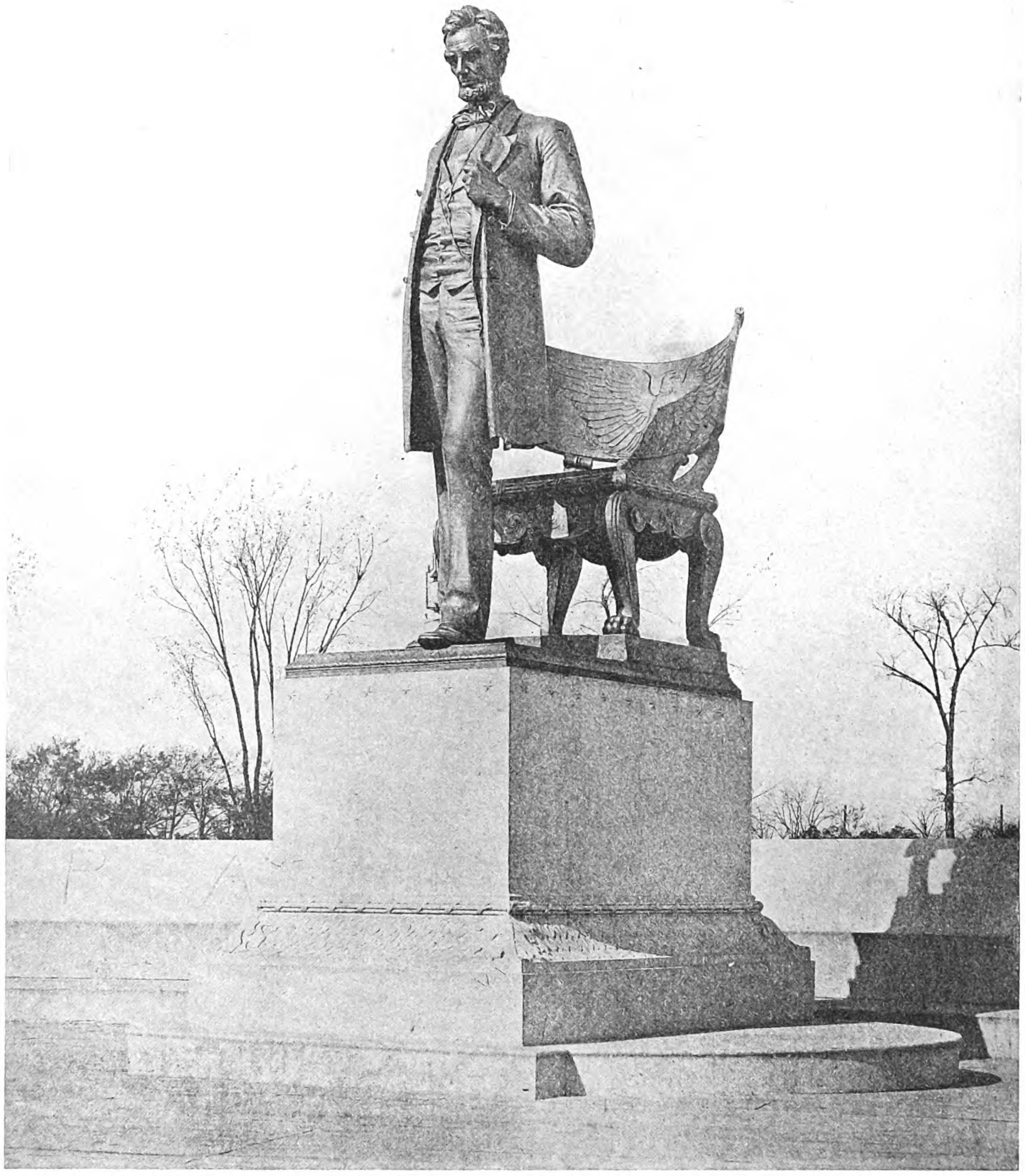
"The opinion of Mr. J. S. Sargent, R.A., was sought, but was not obtainable. Recently a communication had been received from the other side stating that 'wide divergence of opinion existed in the States as to the respective merits of the St. Gaudens and Barnard statues.' The Commissioner felt that he had nothing to do with the choice; that concerned only the donors. The face of the Barnard statue was modelled from a mask taken of Lincoln's face during his lifetime."

Lord Weardale's explanation of the case is as follows: "When it was decided by our committee to set up in public positions in London statues of Washington and Lincoln, a fine replica of a statue of the former for this purpose was presented by the State of Virginia to the British Government, and it was further proposed by our American friends that a statue of Lincoln should be similarly presented, and a replica of the statue by Augustus St. Gaudens was suggested as suitable. Time passed, however, and this suggestion never materialized, and eventually Mr. Charles P. Taft, brother of President Taft, made to the committee the generous offer of a replica of Barnard's statue, which the committee gratefully accepted.

"The statue by Barnard was erected by public subscription in the City of Cincinnati, and is considered, we understood, by millions of Americans as a most faithful presentment of Lincoln as he really was.

"We should, of course, cordially appreciate the donation of more than one statue of Lincoln, and worthy sites would readily be found for them. It rests, therefore, with the supporters of the present movement in America to decide which statue they prefer for erection upon the particular site already granted by H.M. Government at Westminster, and, when they have arrived at a definite conclusion, generously to present a replica of the one chosen in preference to the Barnard statue, which, however, would certainly be placed in some prominent position, where I am sure it would be much appreciated by the countless admirers of Lincoln as a popular hero."

It may be recalled that a fine memorial of Lincoln has also been executed by Daniel Chester French.



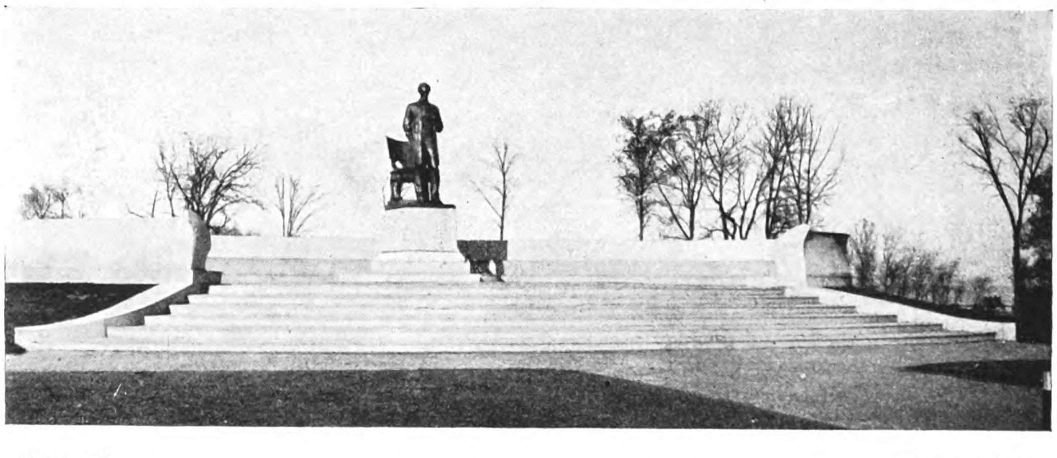


Plate IV. October 1917.

THE LINCOLN MEMORIAL, LINCOLN PARK, CHICAGO.

Augustus St. Gaudens, Sculptor.

L 2

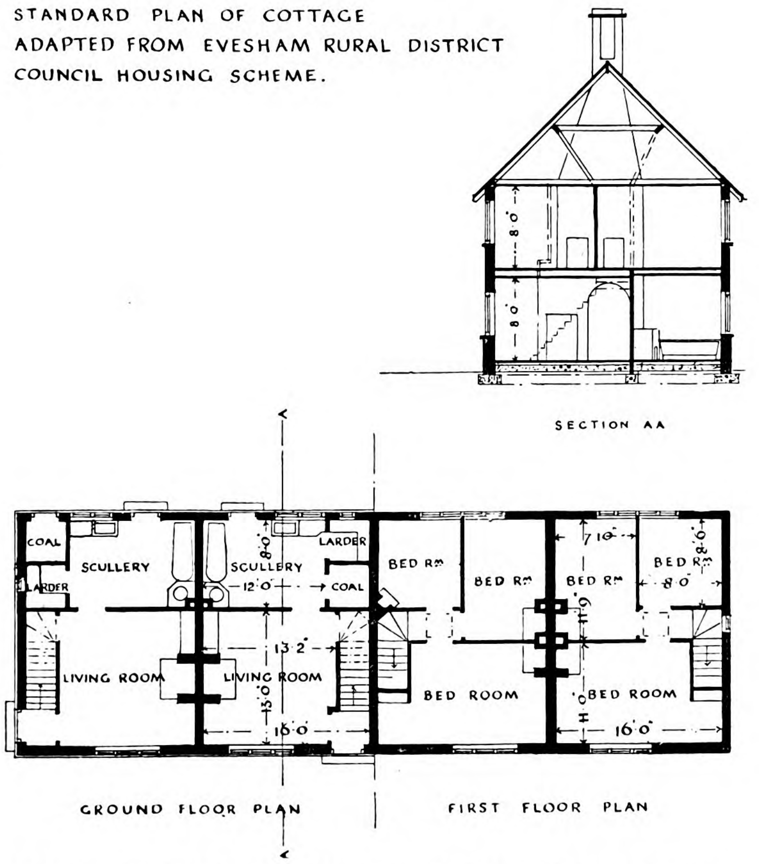
THE WORKING-CLASS HOUSING PROBLEM AND ITS SOLUTION.

By MERVYN E. MACARTNEY, B.A., F.R.I.B.A.

NOW that the Government has appointed a Commission to inquire into the matter of Housing for the Working Classes, it behoves all those directly concerned to do their utmost to help on this most important business. Architects ought especially to be interested, and they should endeavour by every means in their power to assist the Commission to make a success of the finest opportunity ever offered to a community for improving not only the material but also the moral welfare of this country. With this object in view I wish to contribute my mite towards the solution of the problem. In the first place I shall not trouble to discuss the subjects of selection, purchase, or laying out of sites; these are more or less the special province of land agents, house agents, and surveyors. I will apply my remarks more particularly to the questions of: (1) Design, (2) Planning, and (3) Construction of these cottages. Taking these in order, (1) Design.

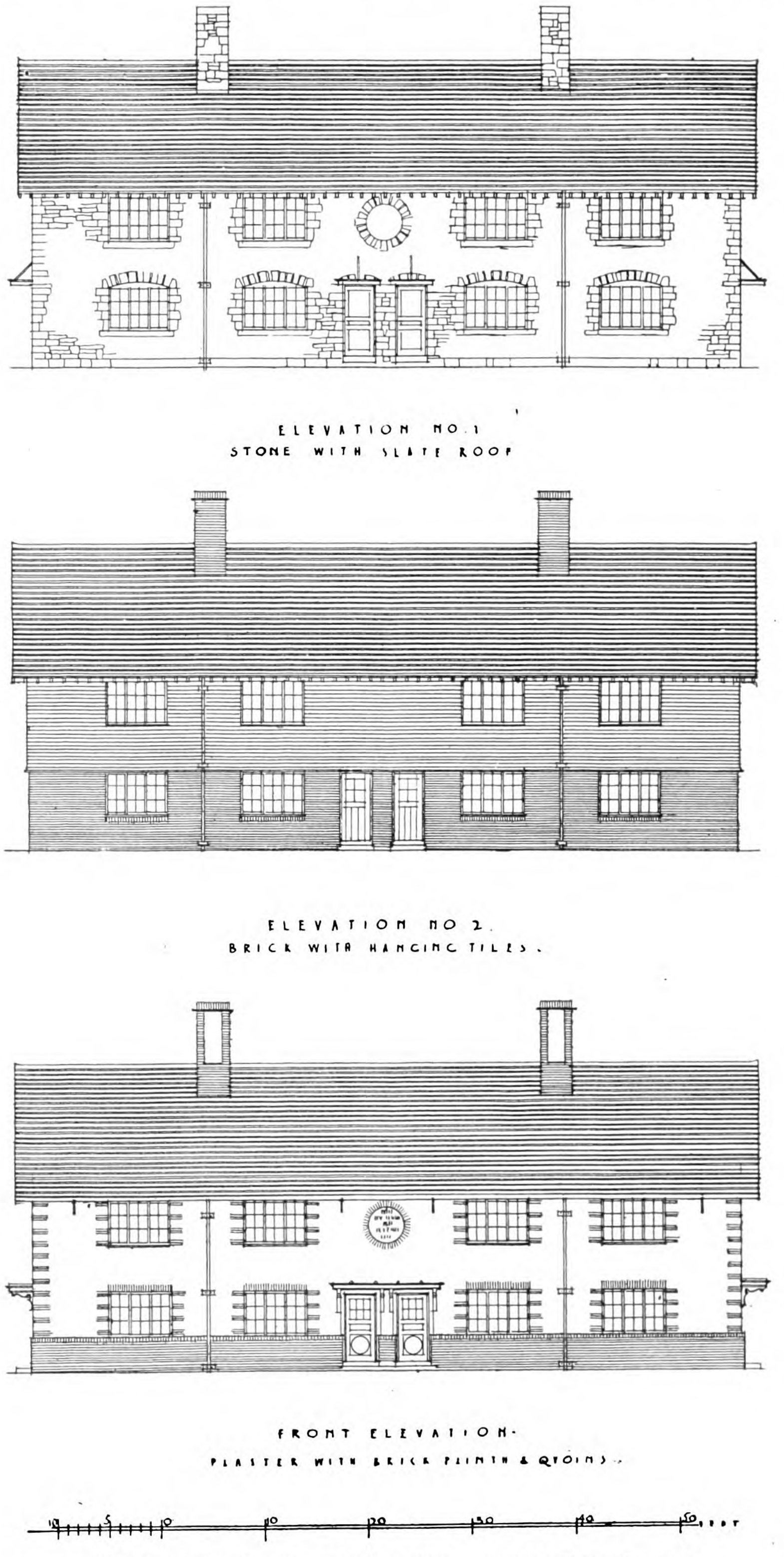
The best guide is to treat every building in the traditional style of the locality in which it would be erected. Brick—where this is the usual material employed, and so on. The only construction I should rule out is half-timber. It is expensive and unsatisfactory. All efforts to make the cottages "pretty" must be eschewed. Inspect any village built before the beginning of the reign of Queen Victoria and you will find innumerable examples of quiet and suitable houses which could be reproduced practically in facsimile. The besetting sin of the present day is the craze for novelty. If the openings for doors and windows are rightly proportioned, and all frills and trimmings discarded, you will have a building which, if not picturesque, will fulfil its purpose and improve by growth of time. There are difficulties to be overcome by the cottage builder of to-day: the conditions insisted upon by the Local Government Board by-laws and the impossibility of imitating the mellowing hand of time.

Most of the old homes of the rural labourer, beloved by the painter, are insanitary. The floors are often only brick on



STANDARD COTTAGE PLAN BY LIEUT. E. HOLLOWAY.

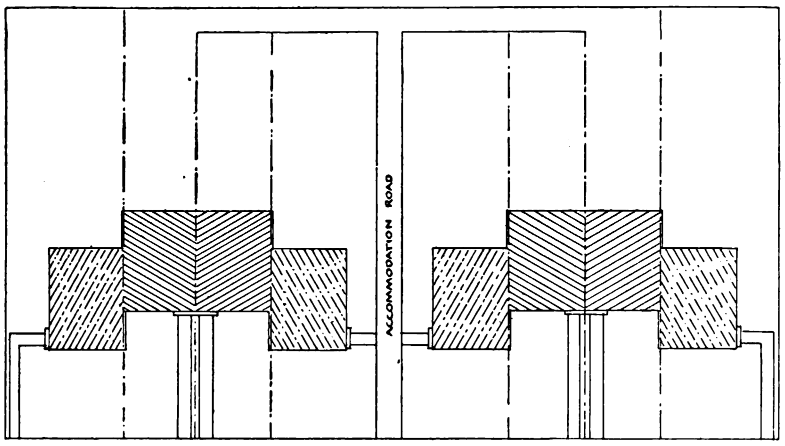
Note.—Outbuildings (tool-shed, earth-closet, etc.) are not shown on this plan, their position and the necessary access to them being dependent upon the site.



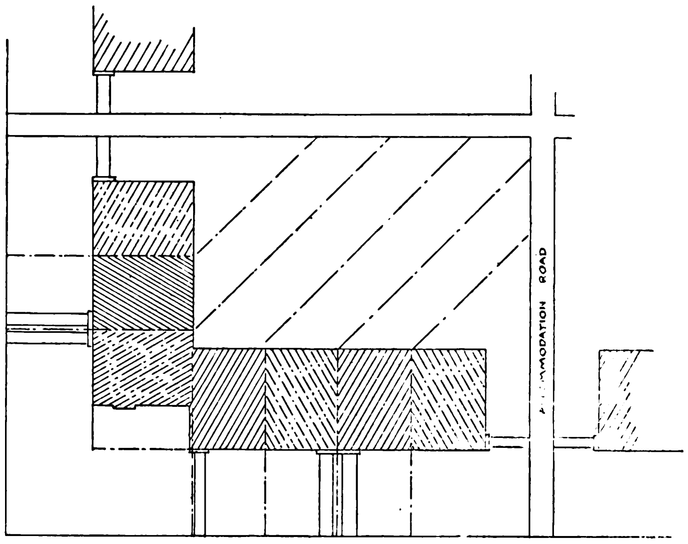
ALTERNATIVE DESIGNS FOR ELEVATIONS TO LIEUT. HOLLOWAY'S STANDARD PLAN.

By J. J Joass, F.R.I.B.A.

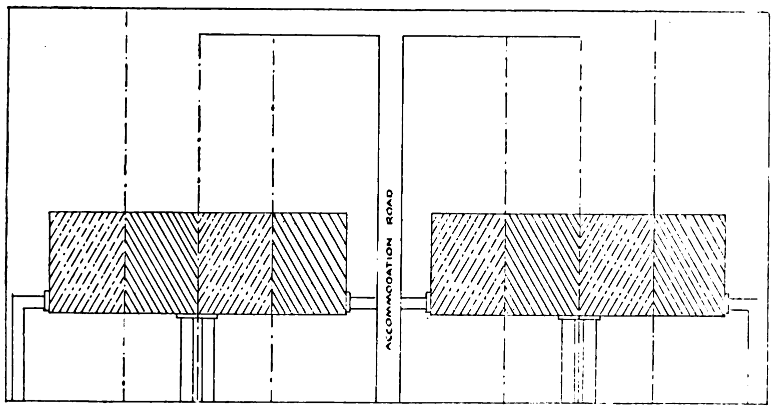
sand, nothing in floors or walls to prevent damp rising, the walls thin and porous to wet, the height of the rooms rarely over 6 ft. 6 in.; the bedrooms half in the roof, with no efficient means of ventilation, no fireplace, and the top of the window generally less than 4 ft. 6 in. from floor. Lastly, the thatch roof is a poor covering against weather, and forms a harbour for vermin and needs constant repair. The doctors and sanitarians have conducted a violent and successful campaign against these buildings, and have insisted on drastic alterations in all these details. Unfortunately, they have gone too far in direction of height of rooms (especially in rural districts), fire-resisting construction and thickness of walls, with the result that these requirements prevent cottages being erected that would pay anyone to build unless aided by the State or some corporate body. I believe that a room with a maximum height of 8 ft. is more capable of efficient ventilation than one of greater height. It is impossible to construct a window (excepting the sash-window shown by the accompanying plan, section, and elevation) which would reach within 9 in. of the ceiling, of any decent proportion without a transome. This



STANDARD PLAN . GROUP 1

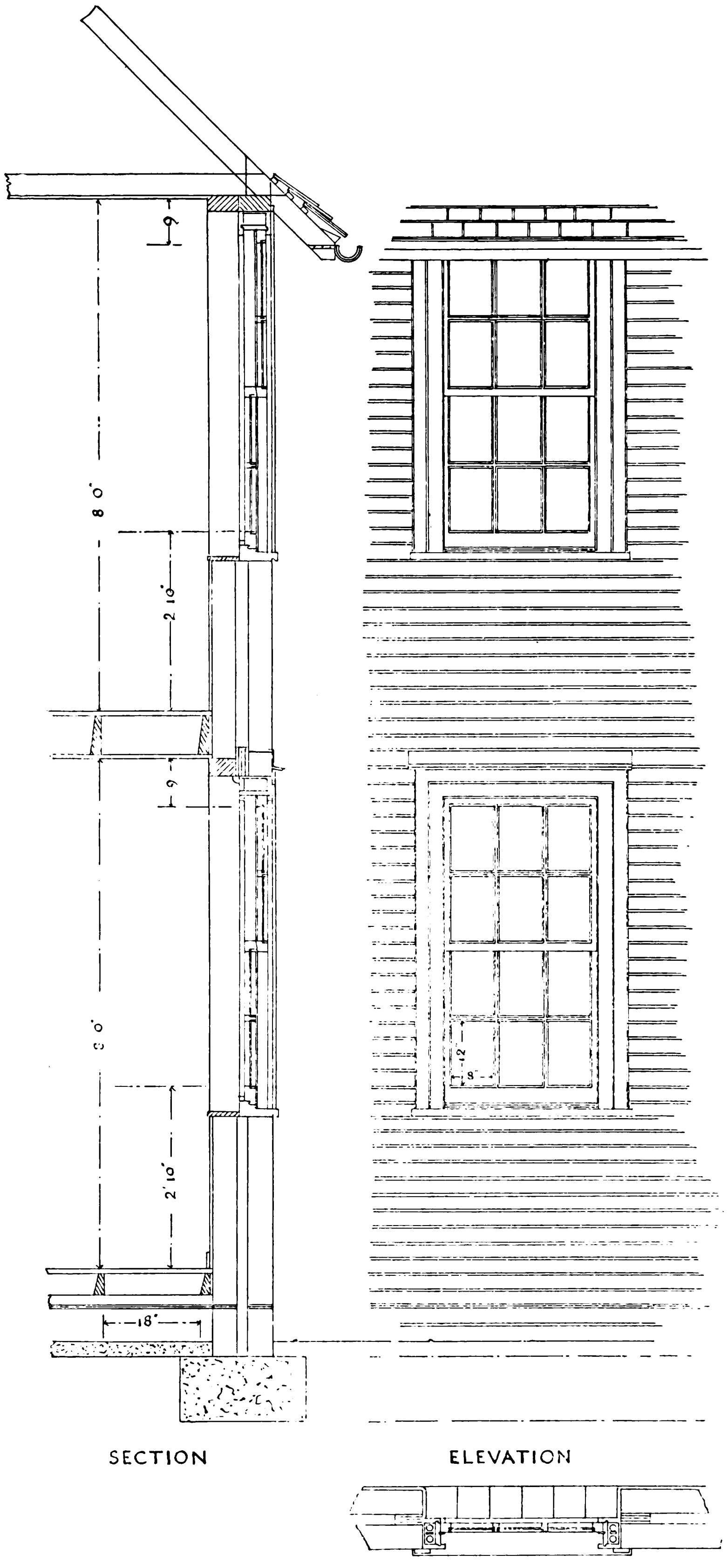


STANDARD PLAN. GROUP 2



STANDARD PLAN . GROUP 3

ALTERNATIVE ARRANGEMENTS IN GROUPING OF THE STANDARD PLAN.

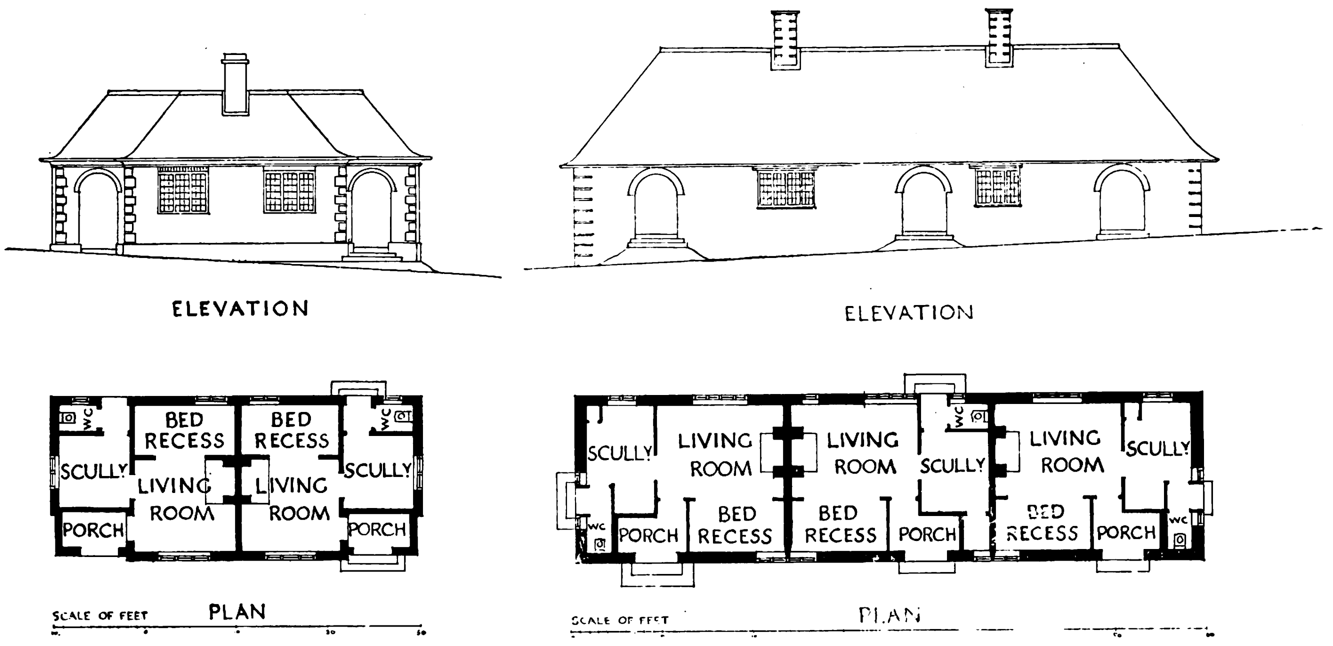


SECTION

ELEVATION

PLAN

SECTION, ELEVATION, AND PLAN OF A GOOD TYPE OF SASH WINDOW.



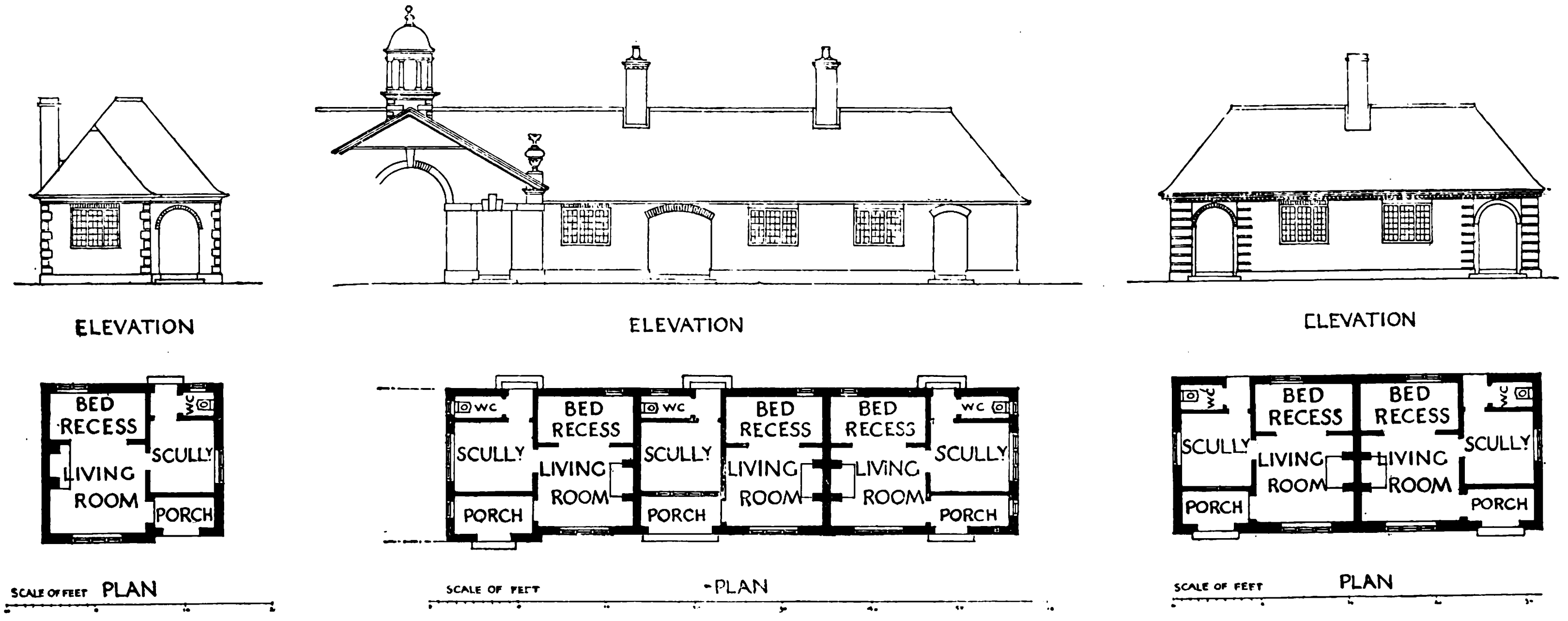
By Mervyn E. Macartney, F.R.I.B.A.

By Walter Cave, F.R.I.B.A.

THE WHITELEY HOMES, BURHILL, WALTON-ON-THAMES.

means that the upper casements could not be opened by a woman of average stature without standing on a chair, and that means that they will not be opened. Again, the Local Government Board by-laws prohibit the use of wood and many other materials for walls, except brick and stone or concrete, and the minimum thicknesses are unnecessarily onerous. Most of the towns in the Western States of America are built of wood, and in Norway you pass through village after village of wood. In the home counties there are hundreds of examples of this construction dating from the middle of the eighteenth century down to the middle of the nineteenth. If the buildings are kept sufficiently detached from their neighbours there is very little chance of danger from fire. The prejudice against them in the minds of the Local Government Board officials makes their employment practically impossible owing to the high rate of interest charged on loans. Æsthetically they are extremely pleasing and economical. As to the roofs, slates or tiles are, in my opinion, the most satisfactory materials available. Cheap substitutes do not appeal to me. Doubtless they are a great initial saving, but I do not believe they will prove so in the long run. These cottages are not temporary buildings, but are meant to last at least a century, and the question of upkeep must not be lost sight of, nor that of dilapidations. Rough-cast, tile and slate hanging, and plaster are all very sound and beautiful methods of construction, and charming examples could be produced from all parts of this country, especially south of the Humber. Wood might be employed in country districts, and patent bricks plastered, such as are made by Colliers of Reading. Abroad and in America the scantlings are less; rafters or spars are often rough poles from larch plantations. By doing this the carting to mills and back to the job, besides the sawing, makes a considerable difference in cost. Again, in France they save in timber by sawing 4 in. by 3 in. diagonally, making two joists where we should only get one. Moreover, instead of 14 in. centres for joists and rafters they space them 18 in. And then a small economy is to bring your plastering up to the solid frames of doors and windows. This is the old Dutch habit, and saves architraves, linings, etc., as well as sweeping away a favourite harbour for insects, etc.

By using a self-setting stove half the brickwork of a chimney is saved. The small portable range has won its way into many cottages in rural as well as urban districts. It has many advantages, but one fatal drawback—that you do not get the British open grate. But the fetish about this (which I must say I worship myself) is being slowly exorcised by the introduction of gas and petroleum stoves, which are more economical and cleanly—advantages which the thrifty house-



By Mervyn E. Macartney, F.R.I.B.A.

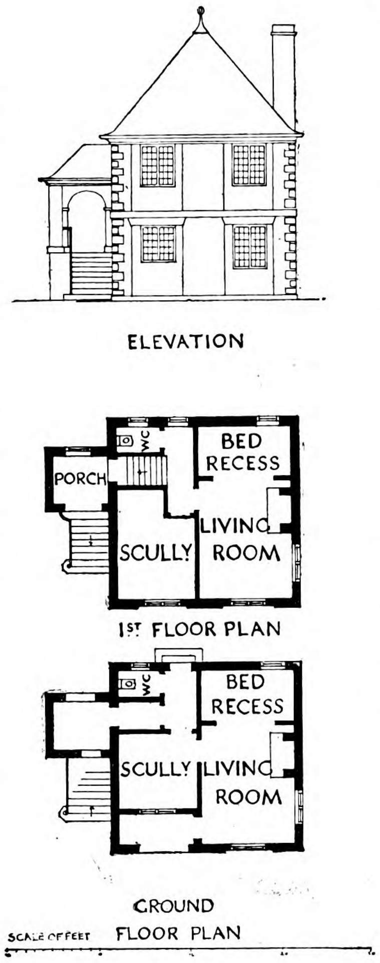
By Reginald Blomfield, R.A., F.R.I.B.A.

By Ernest Newton, A.R.A., P.R.I.B.A.

THE WHITELEY HOMES, BURHILL, WALTON-ON-THAMES.

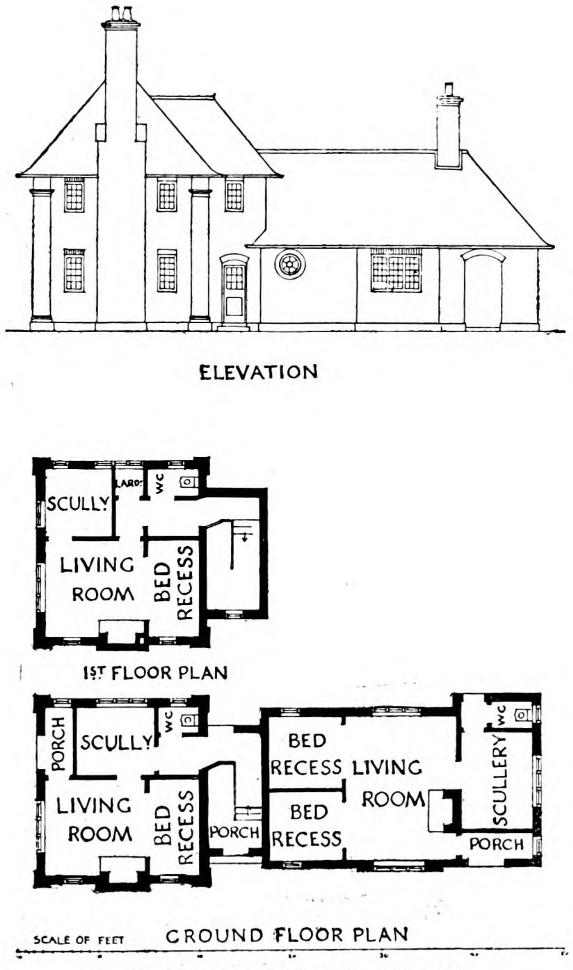
wife is not slow to appreciate. No cottage should have more than one coat of plaster on its walls. The old three coats is extravagant and unnecessary.

As to planning, the bedrock requirements are simple, and you may say pertain through the length and breadth of the country. Two living-rooms and three bedrooms answer the needs of nine-tenths of the workers in these realms. By the courtesy of Lieut. E. Holloway I reproduce in this paper the plans which he created for the Evesham Rural Council. Mr. J. J. Joass has kindly drawn out three alternative treatments of the elevation. They show how different the appearance of an identical plan can be made to look by employing a variety of materials. I have also introduced plans of the Whiteley Homes taken through the courtesy of "The Building News" from plates in that journal. All the architects employed on these designs were instructed to form their plans on a standard plan. The sizes of rooms were practically fixed and unalterable, also fittings, etc. It is interesting and instructive to see how diverse are the results, and this convinces me that it is quite unnecessary to have a great choice of plans. A selection of half a dozen good schemes would, I believe, answer every purpose. The only hope of effecting economy in building is by repetition of the same plan and making the construction of these cottages so simple and easy that the labour of supervision and the need for expert workmen is reduced to a minimum. The late Mr. Chapel used to number all the different items in the construction of a building. He said it paid him handsomely to go into all this detail. By adopting this method, and by standardizing your doors and windows, an enormous amount of time would be saved. I was surprised to find that at the Oxford Conference there was a considerable amount of opposition to my standardizing proposals from the representatives of the Trade Unions, on the ground that it meant passing off a poor unsightly article on the working man. It was no use arguing against this, because the prejudice was founded on ignorance of the first elements of architecture.

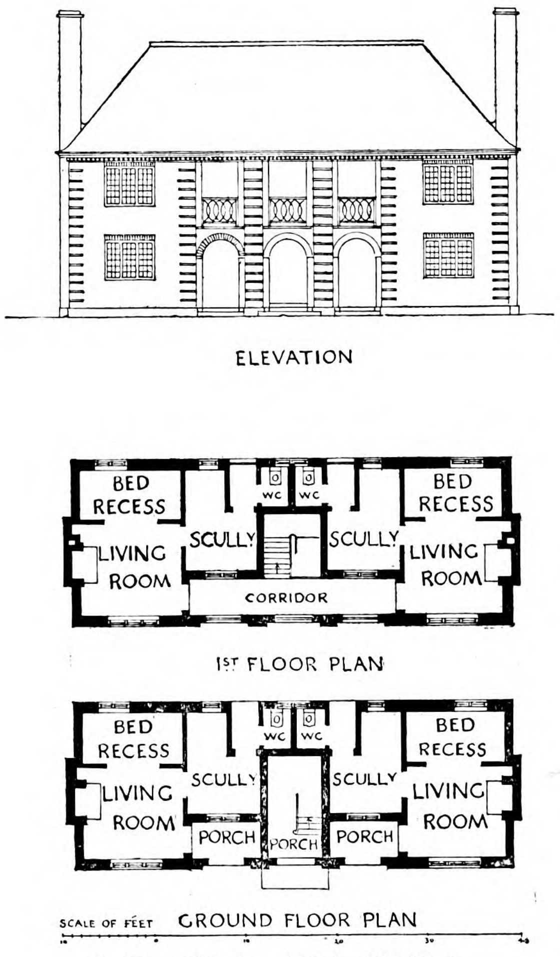


By Mervyn E. Macartney, F.R.I.B.A.

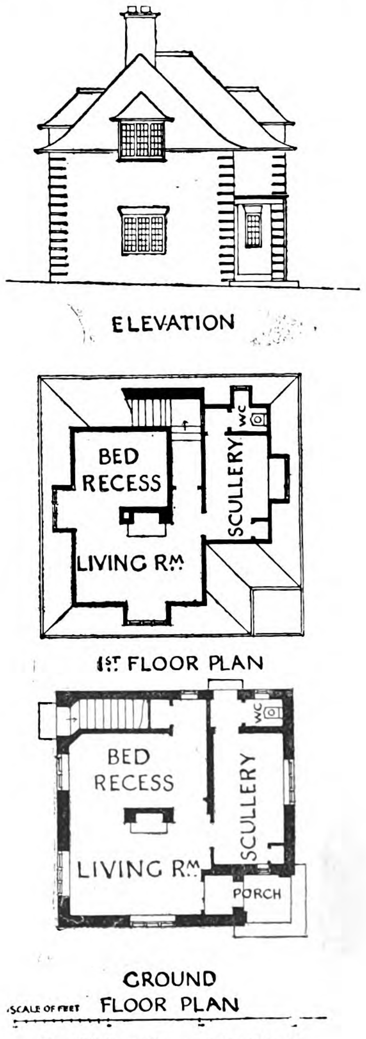
Ornament is not beauty, and a building slimed over with ornament, while it might captivate the vulgar crowd, would be abhorred by the man of taste. If you come to investigate the subject, you will find that the speculating builder has been standardizing his villas for years. Look at the appalling streets of Tooting, Willesden, Leyton, Hammersmith, Fulham, and scores of other London suburbs, as well as our great cities. I feel confident that nine-tenths of the smaller houses built between 1870 and 1900 were practically identical in plan, whether they were built in London, Bristol, Nottingham, or Liverpool. Was any objection ever raised by the artisan or clerk to this standard plan? Why should one deplorable type not



By Reginald Blomfield, R.A., F.R.I.B.A.



By Ernest Newton, A.R.A., P.R.I.B.A.



By Walter Cave, F.R.I.B.A.

THE WHITELEY HOMES, BURHILL, WALTON-ON-THAMES.

only be endured but admired, and yet the adoption of plans passed by men who have studied the subject all their lives be condemned?

As to construction, the only path which leads to any real reduction in cost is, as I stated before, standardization.

The Architectural Review will be pleased to receive correspondence from architects and others on this very important subject, to which Mr. Macartney has supplied such an admirable introduction. Suggestions, more ingenious than practicable, appear in the lay press from time to time. For example, a correspondent of the "Spectator" wrote recently: "There are millions of officers and men who have lived for years in Nisson huts, tents, shacks, and shelters, and those who have at any time possessed a share in a well-warmed Nisson hut during a cold French winter have found themselves sufficiently comfortable to declare that they are no longer willing to spend from one-tenth to one-fifth, or even one-fourth, of their income in rent of a cottage or small dwelling. At the close of the War there will be available a very large number of such huts, which will probably be disposed of to contractors at a few shillings apiece. Could they not be utilized, especially in country districts, and would they not be accepted by men who have learned that such a hut is cheap and good, and who have got rid of old-fashioned prejudices in favour of stone and lime or brick houses, which cost a great deal, and, when badly built, are poor enough shelters?" All such rather desperate expedients seem to assume tacitly that while everything else is progressive the conditions of rural labour are immutable. Until that fundamental fallacy is finally uprooted, discussion of the rural housing problem must be to a considerable extent futile, because the most vital factor is ignored.

ILLUMINATION AND THE ARCHITECT.

THE design of buildings is in many respects determined by the admission of daylight. This is the chief factor in deciding the size and shape of the most modern schools and factories; but in any interior of architectural distinction the natural lighting will likewise receive close attention from the architect, for the appearance of the room by day depends very greatly on the way the lights are arranged.

On the other hand, artificial lighting, generally speaking, does not seem to receive the attention which it deserves from the architect. When the expenditure allotted to the various features in a building is apportioned, the artificial lighting is apt to be left to the last. This is not as it should be. Illumination is a necessity and not a luxury; for example, it is vital to the proper use of schools and libraries, and in factories it has an important influence on health, freedom from accidents, and quality and output of work. The appearance of a noble interior may be quite spoiled by the use of unsuitable and unsightly fittings. In these days the appearance of a room by artificial light is quite as important as by day; in many cases more so. Some buildings—theatres and picture palaces, for example—are used almost exclusively by artificial light.

During the last decade, illuminating engineering—the art of applying light for purposes of illumination—has made immense strides. The subject is now too complex to be studied in complete detail by the architect, whose attention is necessarily spread over a great variety of matters. There have been marked improvements in lamps and fittings, and a corresponding advance in our knowledge of how to use them. We can now manipulate the distribution of light in many different ways. By the aid of illumination-photometers, lighting effects can be studied numerically, so that to-day it is possible to predict very closely the illumination resulting from a given arrangement of lamps in specified fittings, and afterwards to check these results by actual measurement. At the same time illumination has been studied very closely in relation to the eye. It is necessary not merely to provide a sufficiency of light for any purpose, but to ensure that the eye is not offended by glaring, unshaded sources of light, falling within the direct range of vision, nor by violent contrasts or inconvenient shadows. If sources of high intrinsic brilliancy are used they should be high up and quite out of the field of view, softened or concealed from the eye by appropriate globes, shades, or reflectors.

Improvements in shades and reflectors have had a very marked influence on illumination. To-day the lamp with its appropriate reflector, globe-bowl, or other appliance is considered as one unit. From the illuminating engineering stand-

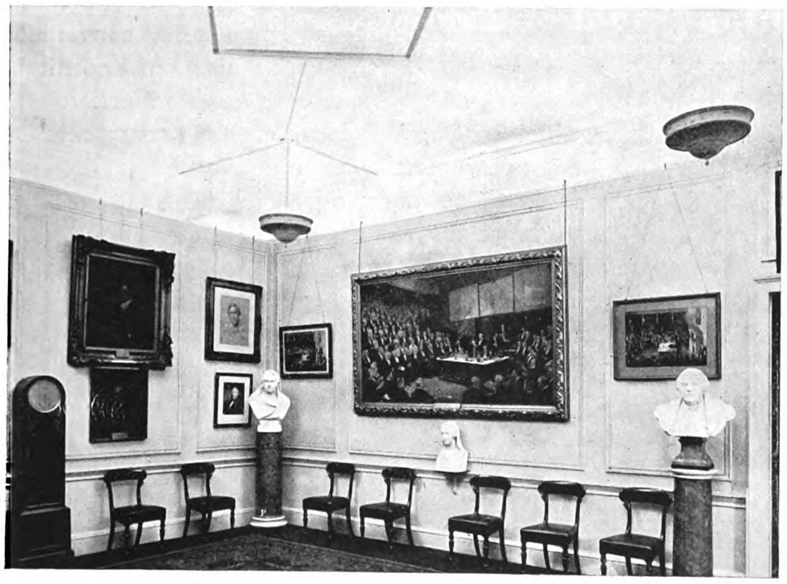


Fig. 1.—INDIRECT LIGHTING IN ANTE-ROOM AT THE ROYAL INSTITUTION, LONDON.

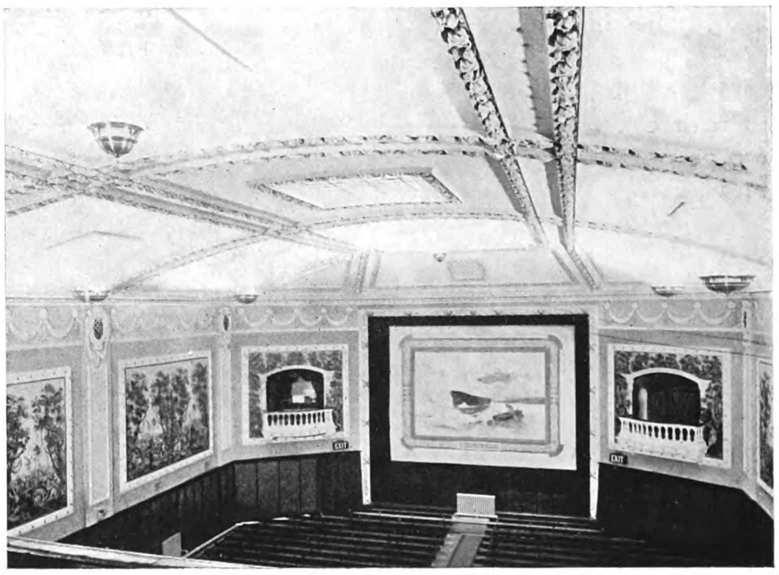


Fig. 2.—INDIRECT LIGHTING AT HOLDERNESS HALL, HULL.

point a well-designed shade or reflector is expected to fulfil one or more of the following requirements:—

(1) It should conceal or soften the light so as to avoid glare.

(2) It should be so designed as to distribute the light where it is mainly needed (in general, on the tables and in the lower region of a room).

(3) It should form a diffusing surface, spreading the light over a more extensive area, and thus softening the shadow.

(4) It should be itself a pleasing and decorative object.

These four requirements will naturally vary in relative importance according to the nature of the problem. In lighting a factory (1) and (2), and in some cases (3), are of paramount importance. In a decorative interior (4) must also receive attention, and is not necessarily incompatible with the others. One still sees in use shades in conflict with all these requirements — for example, reflectors too shallow to cover the light or materially influence the direction of its rays; one even observes shades of clear or tinted glass which merely absorb light, do not alter the distribution, and leave the inconveniently bright filament fully exposed to view. Such shades are not only inefficient, but prejudicial to eyesight. The brightness of the ordinary metallic filament was already so high as to make proper methods of shading highly desirable; in the case of the much brighter "half-watt" lamps it is absolutely essential to shade the direct rays. Moreover, the distribution of light from electric lamps (which may vary within wide limits according to the shape of the filament) is rarely suitable for practical lighting problems. One important object in using a shade or reflector or other lighting appliance is to redirect those rays of light which would otherwise merely escape and dazzle the eyes into directions where they can most usefully be employed.

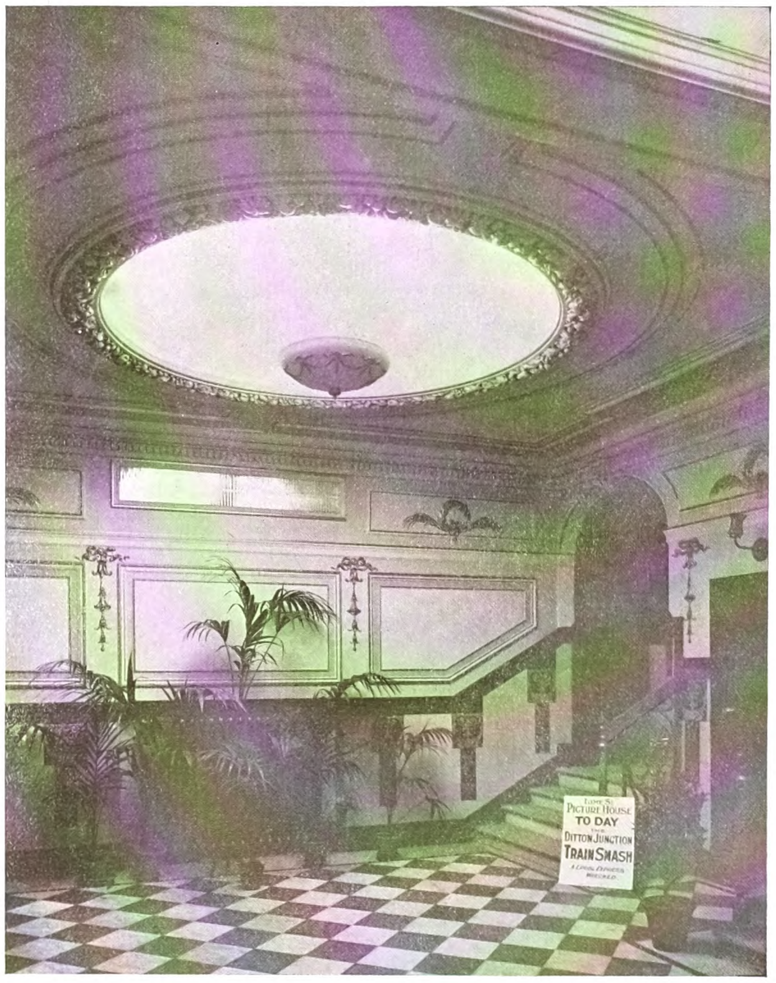


Fig. 3.—INDIRECT LIGHTING IN VESTIBULE OF LIME STREET PICTURE HOUSE, LIVERPOOL.

The walls and ceilings of a room may also be effectively used to promote the diffusion of light, and, speaking generally, it is a great advantage if these surfaces are relatively light in tint. The nature of an object can only be clearly perceived when it receives light from many different directions; the relatively small amount of reflected light available is one of the greatest difficulties in lighting streets and large open spaces.

In lighting an interior we may adopt either general lighting (i.e., flood the entire working area uniformly with light) or local lighting, in which appropriate units are allotted to certain spots where close work is done, or a combination of both methods. There is now a strong tendency in factories towards "overhead lighting" from units mounted direct on the ceiling or girders, especially with half-watt lamps. This leaves the room clear, keeps the lights out of the direct range of vision of operators, and makes it possible to alter the positions of machines, etc., without much interference with the illumination effects.

In these circumstances we employ direct lighting, i.e., lamps in open reflectors. The distribution of light from such units has been accurately determined, and directions are given by modern firms concerned with such appliances for the correct spacing to produce uniform illumination. It is possible to determine, with an accuracy quite sufficient for practical purposes, the illumination to be produced on the working plane by a given consumption of electricity per square foot. For example, with well-designed direct lighting with tungsten lamps, half a watt per square foot gives approximately two foot candles; with gas-filled ("half-watt") lamps the consumption for a given illumination would naturally be less. Experience also enables us to judge with fair accuracy the conditions of illumination necessary for various industrial processes, although special cases will always arise which have to be studied on their merits.

We have also a choice between direct, semi-indirect, and indirect lighting. While direct lighting is mainly used (though not exclusively) in factory lighting, there are many opportunities for indirect and semi-indirect methods in offices, theatres, etc., and for domestic use. In indirect lighting, the source of light is completely shielded and its rays are reflected on to the ceiling, whence they are diffused throughout the room. The lamp is often mounted in a bowl suspended from the ceiling, but it is sometimes convenient to make use of cornices, etc., for the reflection of light. This method has made considerable progress since the introduction of the half-watt lamp, and has several distinct advantages. The complete shielding of the lamp is favourable to elimination of glare; the diffusion of light from large surfaces gives soft shadows, causes the light to penetrate into every corner, and avoids inconvenient reflections of light from the polished surfaces of books, etc.

Architecturally, these methods have distinct possibilities, but they must be skilfully applied. The impression of flatness and monotony sometimes arising from this form of lighting may be due to imperfections in design and application. In some cases it is desirable to relieve this impression by the use of bracket fittings or other local lights, equipped with an appropriate mildly luminous shade, which serve to "break up" any apparent monotony in the surroundings.

Indirect lighting involves, as a rule, a somewhat higher expenditure of electricity to produce a given illumination on the working plane, but the fact of a much larger proportion of light being shed on the walls is often an advantage for showing up pictures, etc. Through the courtesy of The British Thomson-Houston Co., Ltd., who, while utilizing all these methods of lighting, have been largely responsible for the scientific development of indirect lighting, we are reproducing in Fig. 1 a view of their installation in the ante-room at the Royal Institution, taken by artificial light. This is a typical example of the effect of relatively high illumination on the walls, allowing the pictures, busts, etc., to be clearly seen. Figs. 2 and 3, referring to installations by the same firm, show the application of this method to cinema theatres, for which it is considered to be specially suitable. The plan of arranging the bowl immediately under a dome makes the lighting unit appear quite a natural element in the general design.

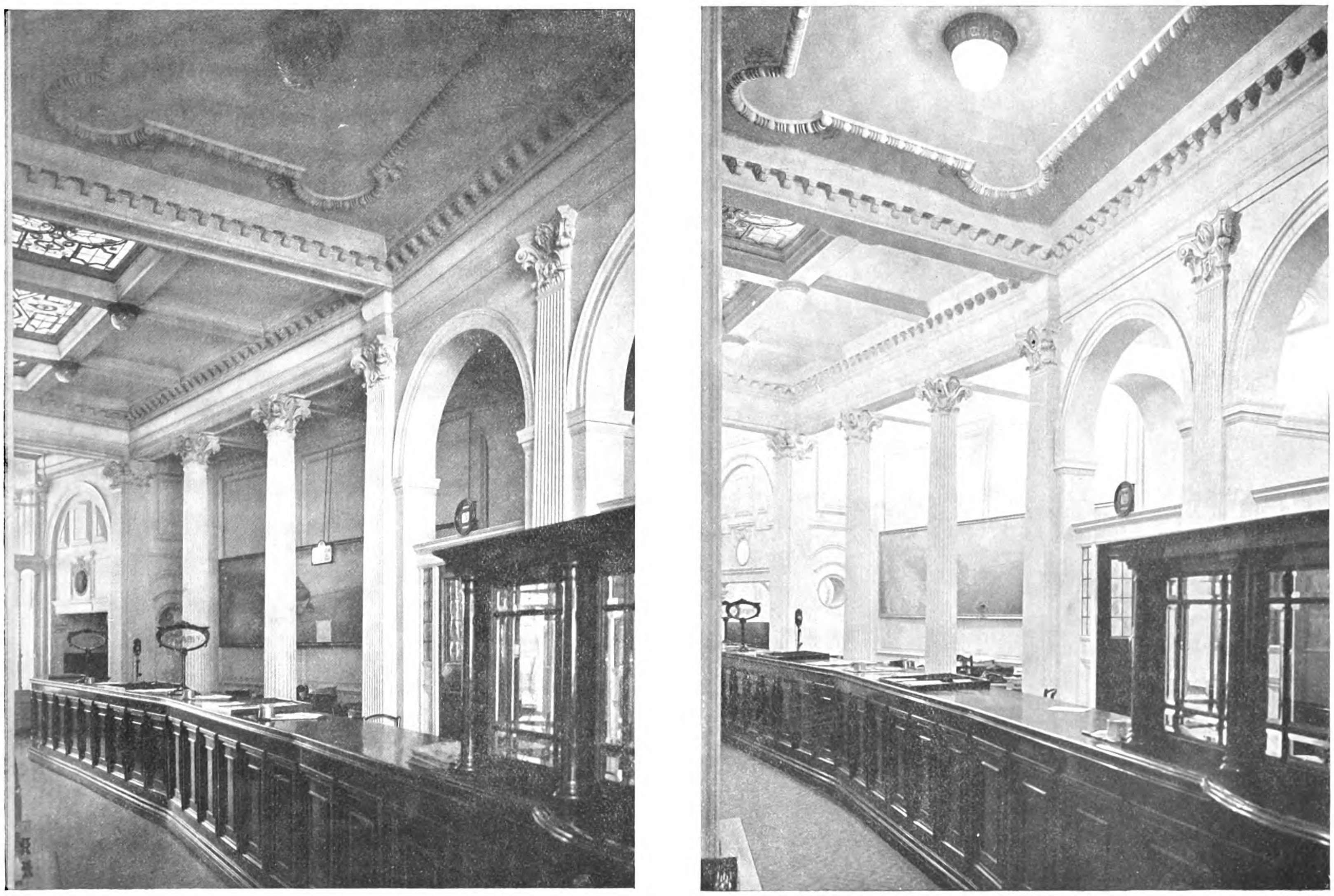
Semi-indirect lighting resembles indirect lighting, except that the bowl is made of translucent glass, so that some direct light is received. The design of these ornamental glass bowls affords exceptional opportunities for artistic treatment, and the effect of the transmitted light is often useful in avoiding monotony of brightness, where there is a danger of this impression being produced.

The possibilities of decorative lighting in halls and other large interiors has not yet been fully developed. To get the finest results the design of the building and the lighting should be worked out together; it hardly offers a fair chance to the lighting expert if his assistance is only invited when the building is practically complete; in these circumstances it is often exceedingly difficult to get the desired unobtrusive effect and to make the lighting an integral feature of the general design.

As an additional instance of the combination of structural design with the study of lighting conditions, we may mention the lighting of underground passages on some of the tube railways by lamps concealed in slots in the upper wall. In a recent American installation the idea has been carried further by cutting sections in the walls and inserting lamps behind panes of diffusing glass. The lamps have special blue bulbs giving a colour of light closely resembling daylight, and the passage is thus made to appear as though it were above ground, and receiving natural light through windows in the ordinary way.

Figs. 4 and 5, which were displayed before the Illuminating Engineering Society some time ago, show the difference in appearance of an interior by natural and artificial light. Notwithstanding the reversal of the shadows, the effect of the artificial light is pleasing—perhaps even more so than the natural illumination. It has been remarked that the impression made by an interior is, in many respects, mainly determined by the artificial lighting. Why therefore not recognize this, and ensure that the artificial lighting is such as to display the interior to the best advantage? Artificial lighting wisely applied need not be an incongruous element, but may add much to the beauty of an interior.

A somewhat complicated problem arises in the case of old churches and mansions and buildings of historic and antiquarian interest. Here, it is sometimes contended, one



Illuminated by Natural Light.

Illuminated by Artificial Light: Note reversal of Shadows.

Figs. 4 and 5.—OFFICES OF THE ALLAN LINE, COCKSPUR STREET, LONDON.

should aim at reproducing the original lighting conditions. One can appreciate this view, though, logically, it would involve adhering to the use of oil lamps and candles. But, as a matter of fact, the tendency is for electricity to be used more and more for such buildings; and if a certain sacrifice of artistic fitness to modern convenience is made, one should at least take pains to make the new illuminant unobtrusive, and, so far as possible, harmonious with the general scheme. One may conform to a distinctive style of fitting and yet not offend against the fundamental principles. Yet one often finds that electric lamps are introduced without any regard to artistic considerations; those responsible seem to have despaired of avoiding incongruity, and to have allowed the contractor to install lights and fittings which are a positive eyesore.

In all such cases much might be done by the co-operation of the architect and the lighting engineer. There are now firms, such as The British Thomson-Houston Co., which have an illuminating engineering department able to advise and prepare lighting schemes; and there are also now arising independent specialists in lighting, who, in the case of important buildings, could help the architect by acting as an intermediary with the firm supplying the lighting appliances. There is no reflection on the architect in thus seeking expert help. Already he invites the assistance of experts on heating and ventilation, and it is unreasonable to expect him to be familiar with the constantly changing developments in lighting in the same way as one who has made illumination his special province. In taking advice on this subject he is only following the precedent of the general medical practitioner who consults a specialist in complicated cases.

A notable instance of such co-operation was afforded by the design of the Carnegie libraries in New York about ten years ago, when plans were worked out by the architects and the consulting illuminating engineer conjointly, and with very beneficial results. Another instance of such co-operation was the remarkable Soldiers' Memorial Building at Pittsburg. There is also ample room for co-operation in regard to external lighting, both of streets and the outsides of buildings. Skill and forethought might make our streets more pleasing by night than by day. This is one of the many problems in lighting which in general cannot be very actively dealt with at the present moment, but will deserve attention when we return once more to normal conditions, and even at present when new installations are undertaken or plans are being prepared for future action on a large scale.

ST. PAUL'S CHURCH, STONYCROFT, LIVERPOOL.

IN the general design of this new church by Mr. G. Gilbert Scott, F.R.I.B.A., an attempt has been made to obtain an effect by largeness of scale and dignity of proportions rather than by elaboration of treatment. The main idea consists of three transepts on each side of the church, with a large square tower at the intersection of the central transept with the main roof. Internally, the intersection of the transept vaulting with the main vault produces an original and striking effect, and results in the main arcade being composed of high and low arches alternately. In the transepts at each side, and in the end gable facing Derby Lane, are groups of three tall lancet windows. The church stands on a foundation of red sandstone rock about 10 ft. below ground level, and its principal dimensions are as follows: Internal length,

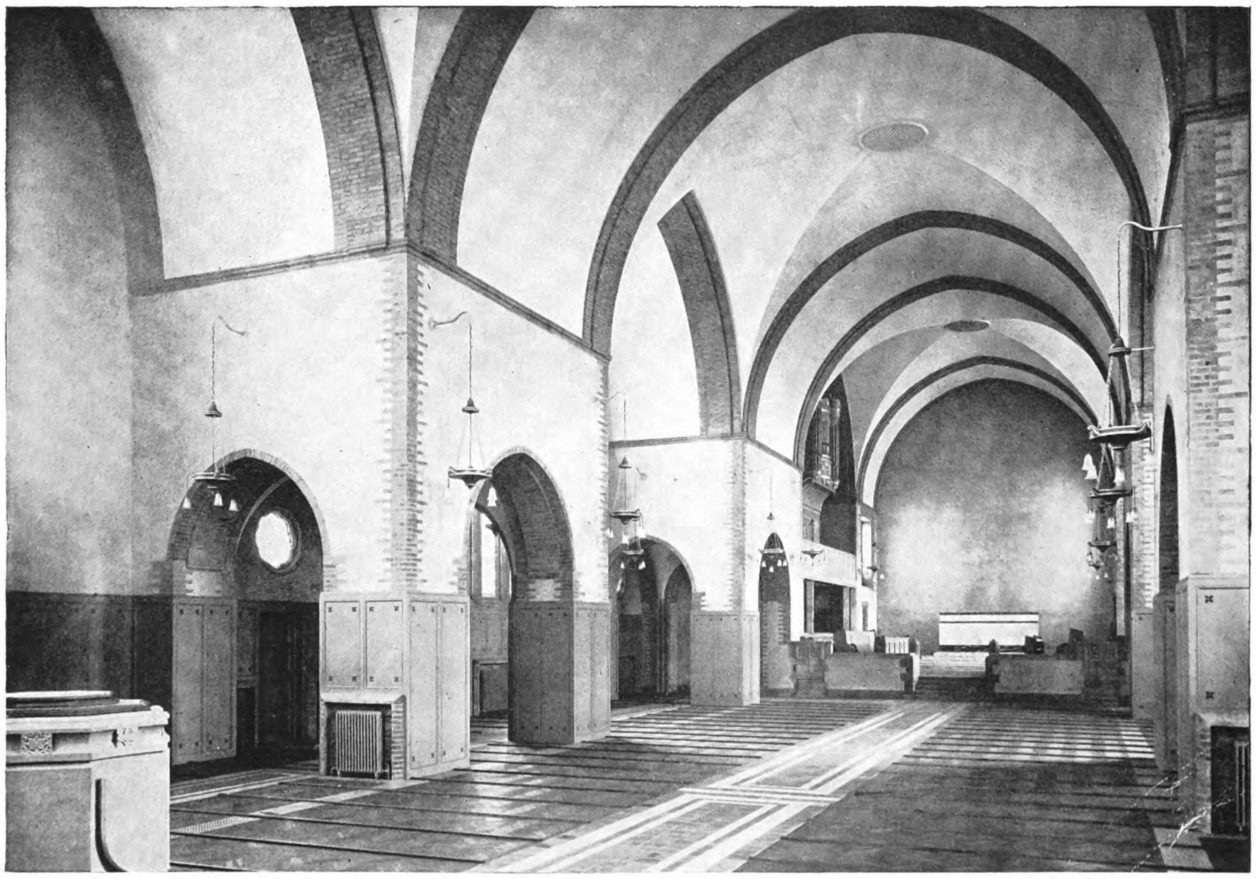


Photo: Stewart Bale, Liverpool.

ST. PAUL'S CHURCH, DERBY LANE, LIVERPOOL: INTERIOR, LOOKING EAST.
G. Gilbert Scott, F.R.I.B.A., Architect.

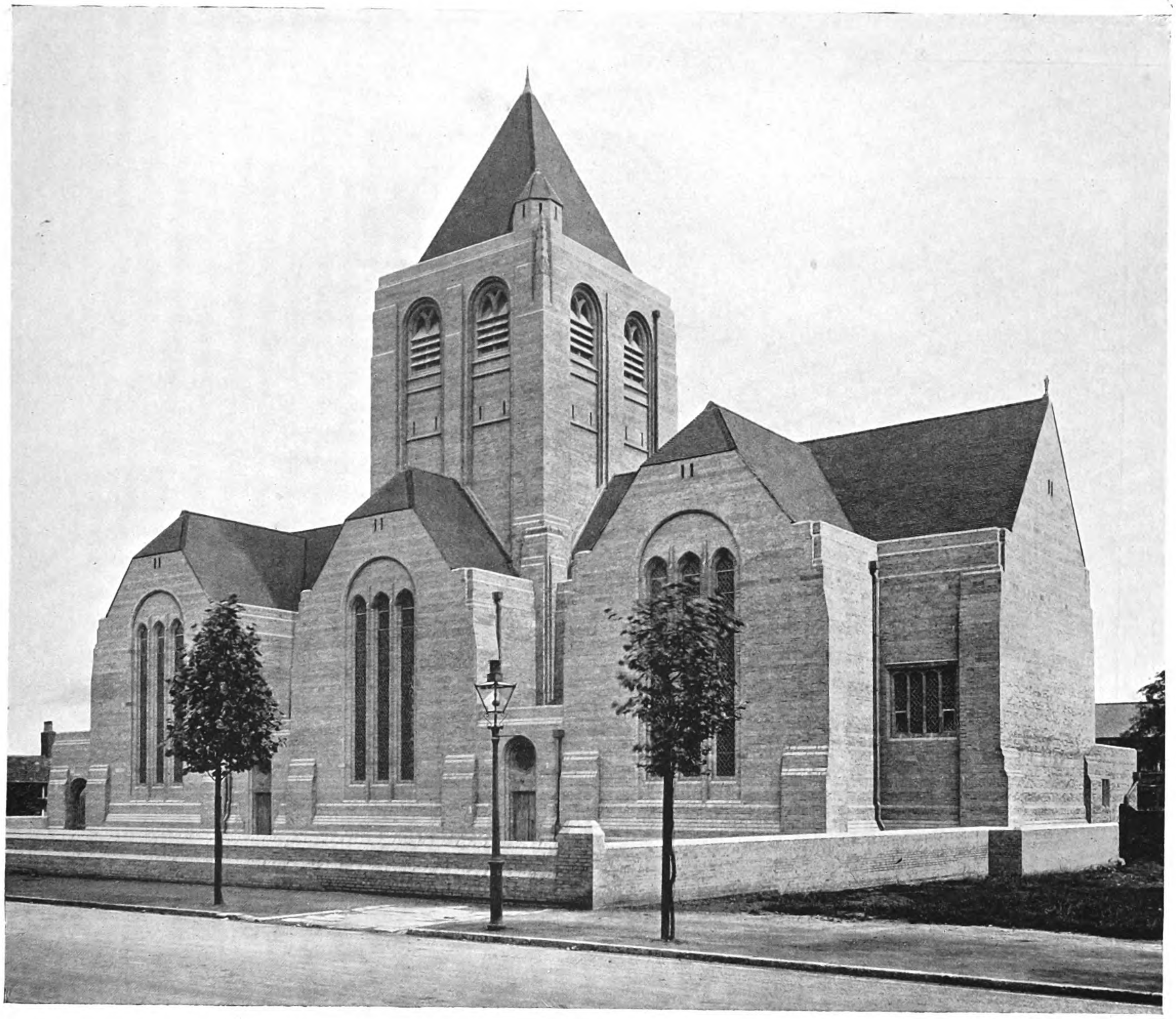
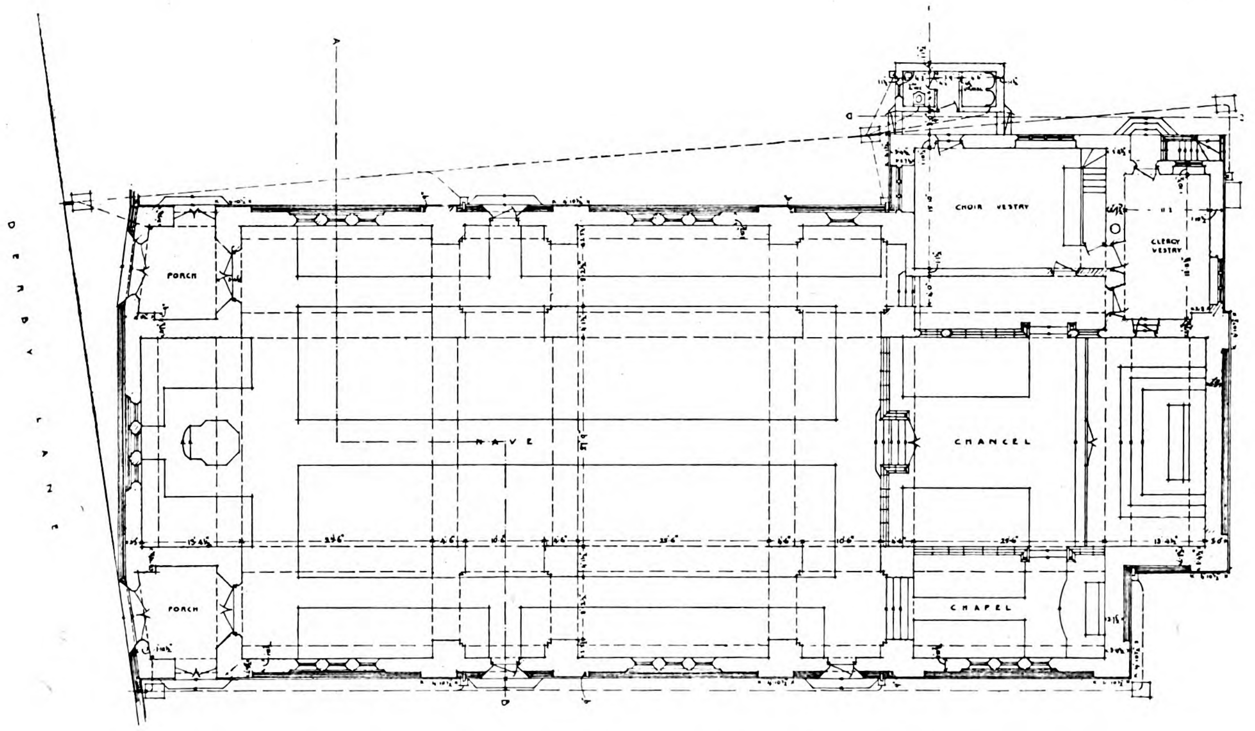


Photo : Stewart Bale, Liverpool.



ST. PAUL'S CHURCH, DERBY LANE, LIVERPOOL : VIEW FROM SOUTH-EAST.

G. Gilbert Scott, F.R.I.B.A., Architect.

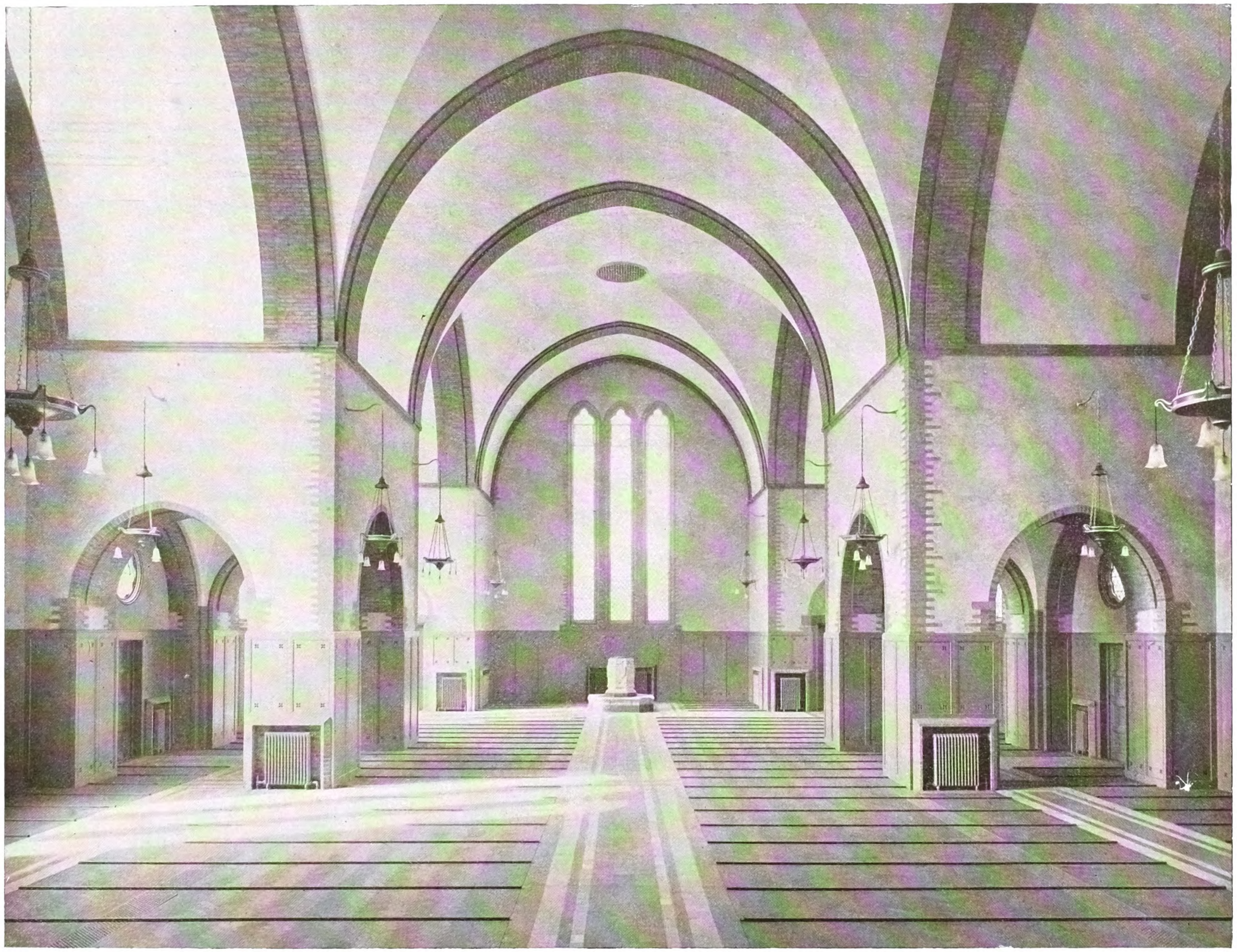


Photo: Stewart Bale, Liverpool.

ST. PAUL'S CHURCH, DERBY LANE, LIVERPOOL: INTERIOR, LOOKING WEST.

G. Gilbert Scott, F.R.I.B.A., Architect.

142 ft. 3 in.; width of nave and chancel, 27 ft. 9 in.; total internal width (including aisles), 57 ft. 4 in.; height of nave and chancel roof, 40 ft. The tower rises to a height of about 80 ft., and is surmounted by a pointed roof, making the total height to the apex about 108 ft. Accommodation is provided for a congregation of about 640 persons. The walls of the church are of concrete faced on both sides with brickwork, that to the exterior consisting of small silver-grey bricks, specially made for the work. These, together with the grey terra-cotta which is used throughout in place of stone dressings, were supplied by J. C. Edwards, of Ruabon. The roof generally is covered with hand-made tiles, the flat aisle roofs being of reinforced concrete covered with asphalt. The reinforced concrete work was executed by The Trussed Concrete Steel Co., Ltd. The inside of the church, including the vaulted ceiling, is plastered, with the exception of the quoins, arches, and dressings around windows and doors, etc., which are built with the bricks mentioned. The organ case was designed to embody various pieces of carving from a case that came from the old Renaissance church of St. Paul, which stood in the centre of Liverpool. Messrs. Morrison and Sons, of Wavertree, Liverpool, were the contractors.

Other contractors concerned with the work were: Messrs. The Basford Stone Co., Mr. John Pye, Mr. W. Miles Horsfall, Mr. James Parkinson, Mr. James Gibbons, Messrs. Bainbridge Reynolds, Ltd., Messrs. Farmer and Brindley, Ltd., Messrs. Jeffreys & Co., Ltd., Messrs. Rushworth and Dreaper, Ltd., Mr. John Taylor, Messrs. William Rowlands & Co., and Messrs. Watts & Co.

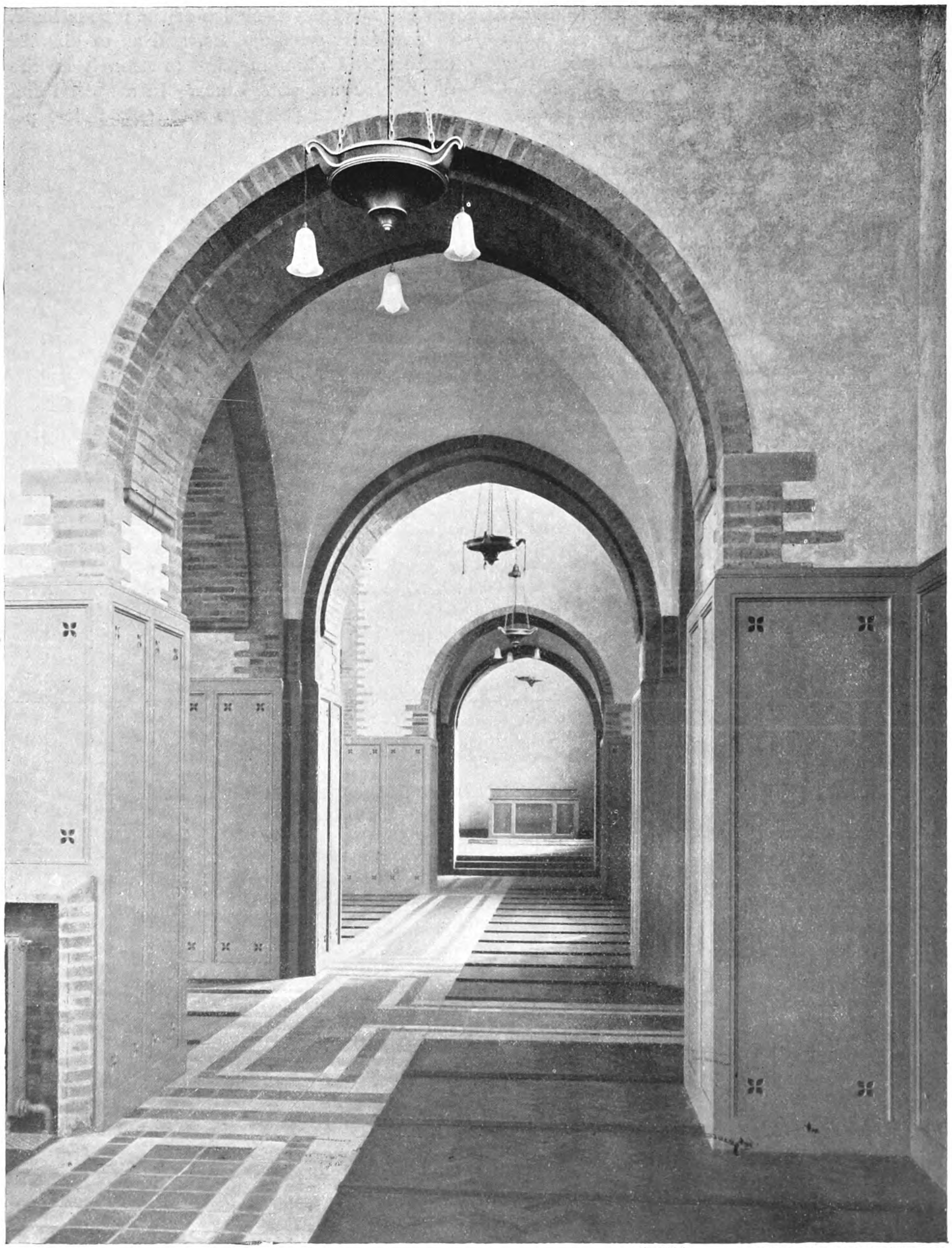


Photo: Stewart Bale, Liverpool.

ST. PAUL'S CHURCH, DERBY LANE, LIVERPOOL: SOUTH AISLE.
G. Gilbert Scott, F.R.I.B.A. Architect.

NEW BOOK.

MODERN INDUSTRIAL BUILDINGS.

BRITAIN'S long start in the manufacturing industries is not without certain disadvantages. Sooner or later, pioneer processes and methods are superseded, and the pioneer is likely to be outpaced and outclassed by those who take up the running from the stage at which he has arrived, and who are unhampered by his prepossessions or his impedimenta. Many, perhaps most, of our manufacturers are rather heavily handicapped by buildings that were put up before the study of principles could become intensive, and before competition was sufficiently strenuous to compel the utmost economy of ways and means of production. Our trade languished because our methods had become obsolete; and Mr. H. G. Wells has expressed the position with his usual trenchancy in making Mr. Britling say: "It was an extraordinary thing that England, which was the originator of the industrial system, and the original developer of the division of labour, should have so fallen away from systematized manufacturing." ("Mr. Britling Sees It Through," Chapter I.)

We are on the eve of a great renaissance of industry. Upon our success in the fierce struggle for commercial supremacy which will ensue immediately upon the restoration of peace will depend our very existence as a first-class power; and it is very plain that the provision of thoroughly efficient factory buildings is a primary condition of competitive production. These are mere truisms, but their reiteration at the present moment is almost a national duty. It is precisely the most obvious things that are most commonly overlooked, and there are indications in this book that Mr. Kahn is well aware of the fact. But his very useful review of the position does not stop short at mere recapitulation. It consists, for the most part, of shrewd deductions drawn from the very comprehensive data with which practical experience in two hemispheres has supplied him, and these deductions he has set forth in a series of tersely written chapters dealing seriatim with all the essentials of the subject.

In a book in which principles are so clearly enunciated it is natural that the modern spirit in industrial organization, in so far as it relates to the planning and construction of the buildings which are to embody it, should be adequately discussed. Mr. Kahn, besides giving sound advice on such practical matters as choice of the type of building most suited to particular requirements, and as to planning, lighting and heating, and plumbing, insists strongly on the business value of architectural appearance. In a special chapter, he shows that it is wise policy to make the fullest possible provision for the welfare of the workers, for whom factory life may be made pleasurable rather than penal, with a favourable effect upon the quantity and quality of their output that, quite apart from the moral obligation to treat them as human beings rather than as machines, is a "business proposition" yielding a return that even the Gradgrinds of this world can appreciate. In a series of more than seventy plates, Mr. Kahn shows many different types of industrial buildings, most of which have quite pleasant exteriors: the accompanying illustration is an average specimen. Mr. Kahn has opportunely produced a book that is at once a harbinger of the new movement in factory building and an important agent in its promotion.

ADMINISTRATION BUILDING OF THE FORD MOTOR COMPANY, DETROIT, MICH.

From "The Design and Construction of Industrial Buildings."

"The Design and Construction of Industrial Buildings." By Moritz Kahn. With seventy-two plates showing Interior and Exterior Views of Modern Industrial Buildings. Price 7s. 6d. net. London: Technical Journals, Ltd., 27-29 Tothill Street, S.W. 1.

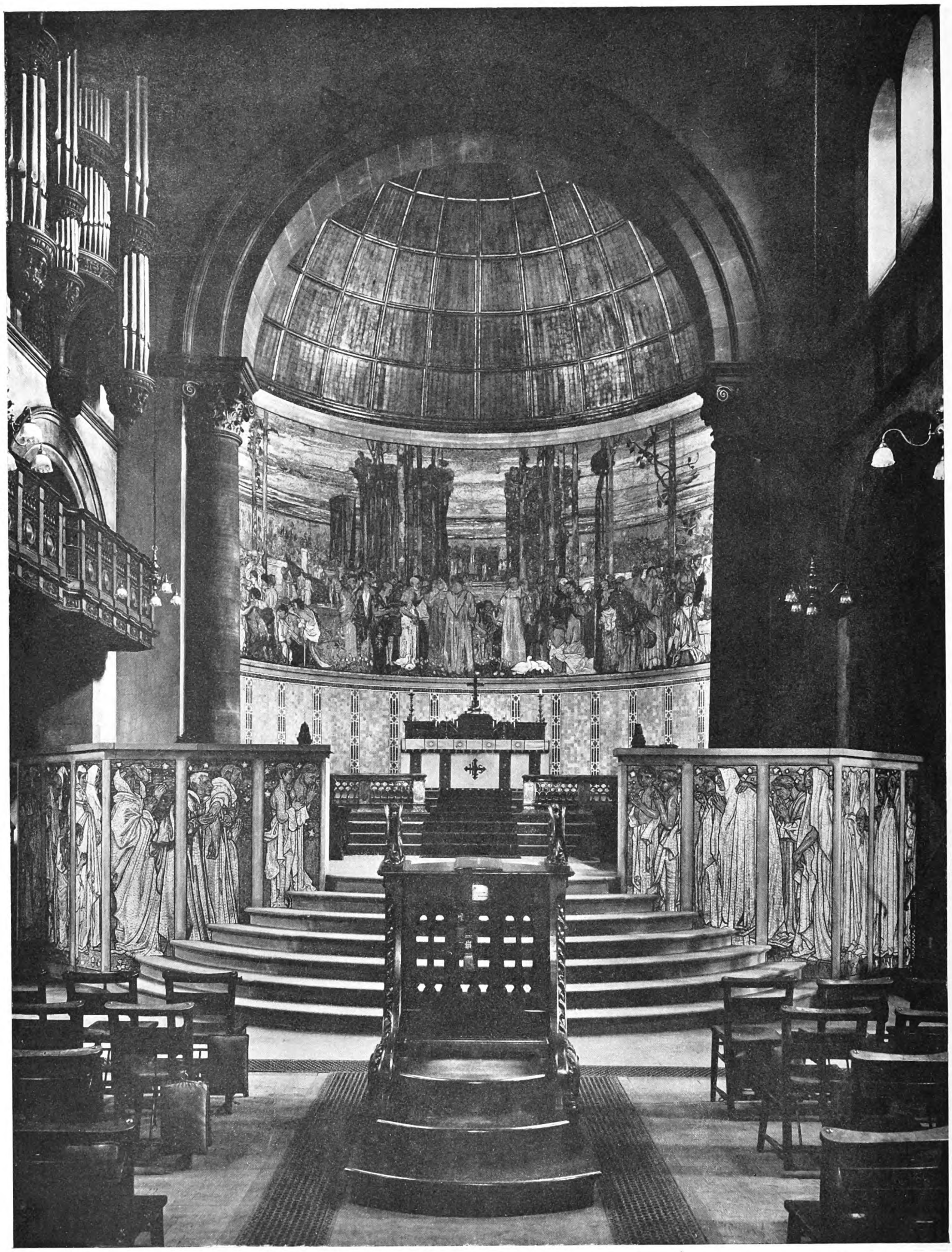


Plate I.

November 1917.

MOSAIC DECORATIONS IN THE CHANCEL OF ST. AIDAN'S CHURCH, LEEDS.

By Frank Brangwyn, A.R.A.

MR. BRANGWYN'S MOSAIC DECORATIONS IN ST. AIDAN'S CHURCH, LEEDS.

By ARTHUR FINCH.

OF all the decorative media used for the enrichment of interior architecture, there is none better than mosaic. In the texture of tesseræ there is a quality that is more akin to the structure of the building than is to be found either in tempera or fresco. It was the recognition of its intrinsic suitability as a decorative medium on a large scale, coupled with its incomparable possibilities for rich colour-effects, that led the master builders of the Byzantine Empire to employ it in the decoration of their architectural masterpieces. With what success they filled the enormous wall-spaces of their churches we have to imagine in the case of Santa Sophia; but in that of Isidore's Basilica of St. Mark, Venice, the testimony of Ruskin speaks in reference to the colour, "the most subtle, variable, inexpressible colour in the world." * In addition, mosaic, if executed properly, is virtually imperishable; for, apart from the devastation wrought by barbarians and the devious devices of restorers, time has dealt kindly with the masterpieces of Ravenna, as represented in St. Vitale and the Galla Placidia.

The superiority of mosaic over other media, especially for ecclesiastical decoration in the hands of capable designers and colourists, would have led one to expect its more frequent use in architectural schemes to-day. Certainly a revival took place in the 'eighties and 'nineties; but the enthusiasm for its employment in modern church decoration has died away, and apart from the work in Bentley's Westminster Cathedral little has been done recently in mosaic decoration of an important character. Despite the quality of permanence, not one of the formulators of war memorial schemes planned to be carried out in ecclesiastical or other buildings has thought of using mosaic as the medium. The spell of inactivity surrounding the employment of mosaic has, however, been broken. It has been left, not, as might have been expected, to an English cathedral church to embody a big decorative mosaic scheme, but to a parish church in an industrial Yorkshire town.

Like the Byzantine Cathedral of Santa Sophia, and the churches of Rome and Ravenna, where the old mosaicists fixed together their wonderful schemes of colour, the church of St. Aidan, in the Roundhay Road, Leeds, is pre-eminently suited for mosaic treatment. It is of the simple basilica type with nave and two aisles, and an imposing apse, somewhat similar in plan to the small basilican churches to be found in Rome and its north-eastern vicinity, and reminiscent in some respects of the more famous Later Romanesque designs in Rhenish Bavaria, such as Speyer Cathedral. The mosaic, which is the gift of Mr. R. H. Kitson, son of a well-known local resident, consists of the principal design in the form of one enormous panel measuring 1,000 sq. ft., occupying the entire centre of the apse, with base having an area of 500 sq. ft. of plain tesseræ, with supporting design of the chancel screen covering 300 sq. ft. Except for the admirable softened gold

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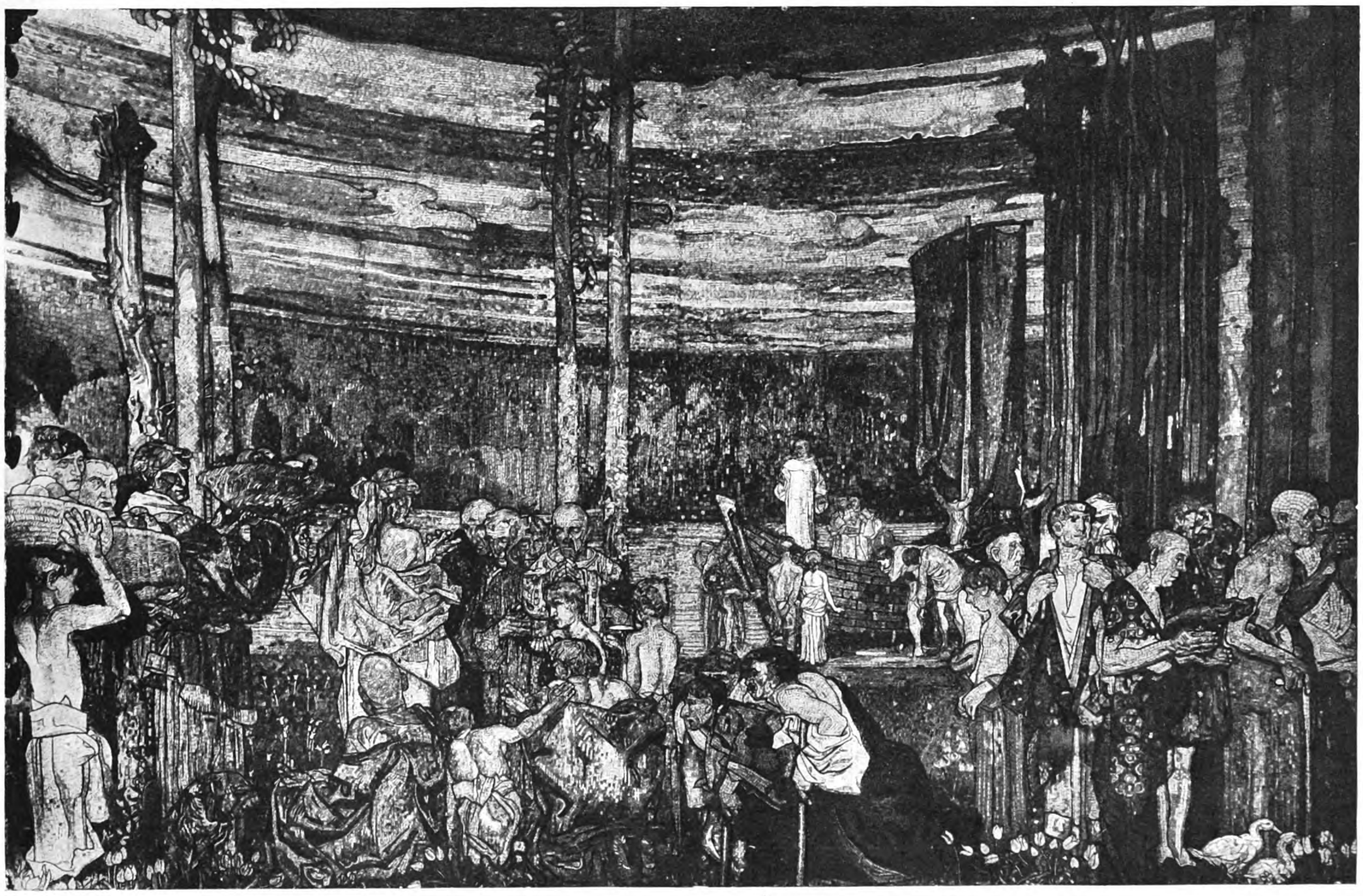
* "Stones of Venice," St. Mark's, Sec. XLII.



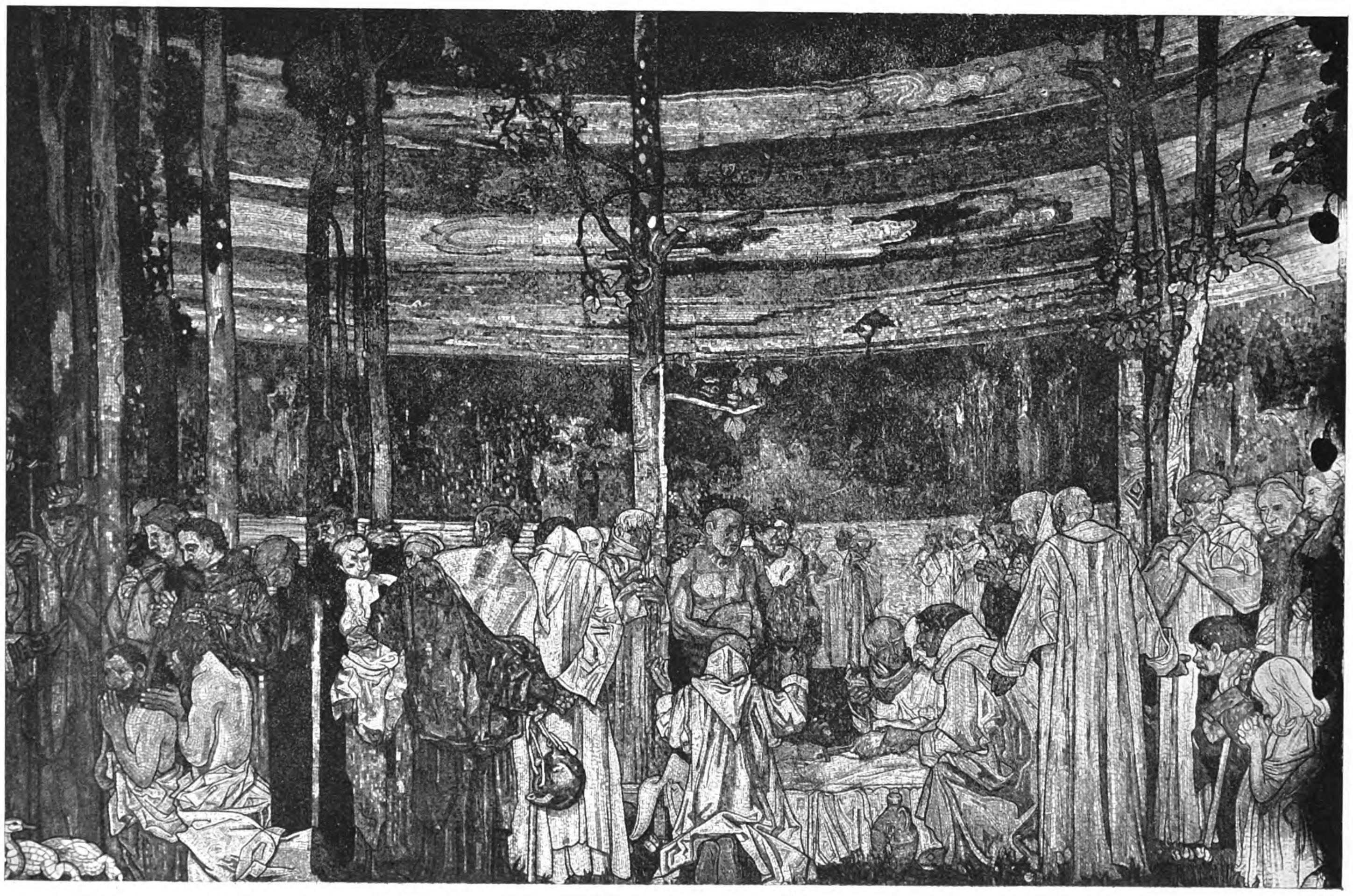
"ST. AIDAN GIVING BUNS AND APPLES TO THE POOR."

tone in the panelled cove, there is little other colour in the interior, so that Mr. Brangwyn has thus been able to render his scheme undisturbed by conflicting masses of colour.

Seeking for an underlying unity in his theme with the edifice which his design would decorate, the artist chose to render episodes in the career of St. Aidan, just as did his compeer, Puvis de Chavannes, by associating the subject of his Panthéon masterpiece with the life of St. Geneviève, the patron saint of Paris. In arrangement this has much in common with Mr. Brangwyn's mosaic decoration. Originally intended for execution in tempera, for which the central composition was specifically designed, it was found necessary to abandon the idea, and to make use of an enduring material like mosaic, impervious to the local atmospheric conditions.

While the design is divided into three subjects, with an episode, "The Landing of the Monks," in the immediate foreground—on the extreme left, "St. Aidan giving Buns and Apples to the Poor"; with the central composition of "St. Aidan Preaching," and the "Death of St. Aidan" on the right completing the scheme—the artist, by his wise system of spacing and apportioning of his figures into interdependent groups, and brilliant arrangement of trees forming background into masses relieved by a simple scheme of colour in the purple blue distance of a sky acting as a background to the brownish outlined trees thereon, with water in the middle distance, binding the whole scheme together, has formed a unified pattern, which was a marked feature of the best work of the Roman school of the sixth century at Ravenna. Although there is a certain formality of manner in the pose of the chancel screen groups of worshippers that may lead the uncritical observer to connect them with the conventional traditions of Byzantine representation, coupled with a somewhat crude mode of figure execution generally, the student of historical mosaic will observe that there is an absolute break with traditional technique. The design is essentially modern both in feeling and rendering of colour. What a gulf is fixed between the vigorous drawing, especially observable in the tense expressiveness of the three kneeling figures in the left foreground group and the inanimate, stiff types characteristic of Byzantine mosaic! Yet how closely is it associated with the best Roman and later Italian work as expressed in Jacopo Torrito's design for the apse of St. John Lateran, Rome! Brangwyn, like Albert Moore in his wonderful cartoons for mosaic for the Central Hall at Westminster, perhaps the most successful from the standpoint of clever figure drawing and decorative quality that have yet been designed for mosaic, understands thoroughly his medium and its limitations. The scheme is treated in a broad manner, with solidity of outline, unspoilt by aspirations for individual trickeries of style which have been the bane of much modern work in this medium, especially that of French mosaic designers; it has a dignity and freedom of execution comparable to the severity and simplicity which characterized Watts's early mosaics for St. Paul's Cathedral, but combining a richer and more varied colour-note than was shown in the work of the great Victorian artist.

The absence of colour reproductions here, despite the fine quality of the one-toned illustrations, will be greatly missed by the lover of brilliant colour; for it is in the arrangement of colour masses and blending of tones that the whole beauty of mosaic is envisaged. But especially in the case of an artist like Brangwyn, whose figures are of the elemental, barbarous type, fashioned from the outpourings of a torrential flowing mental stream, does it convey a false impression on the beholder. Viewed from down the nave, with the play of the afternoon light on the panel, and aided by the excellence of the execution so as to render variations of tones and gradations as in stained glass, with long, vertical lines for draperies and tree



"THE DEATH OF ST. AIDAN."

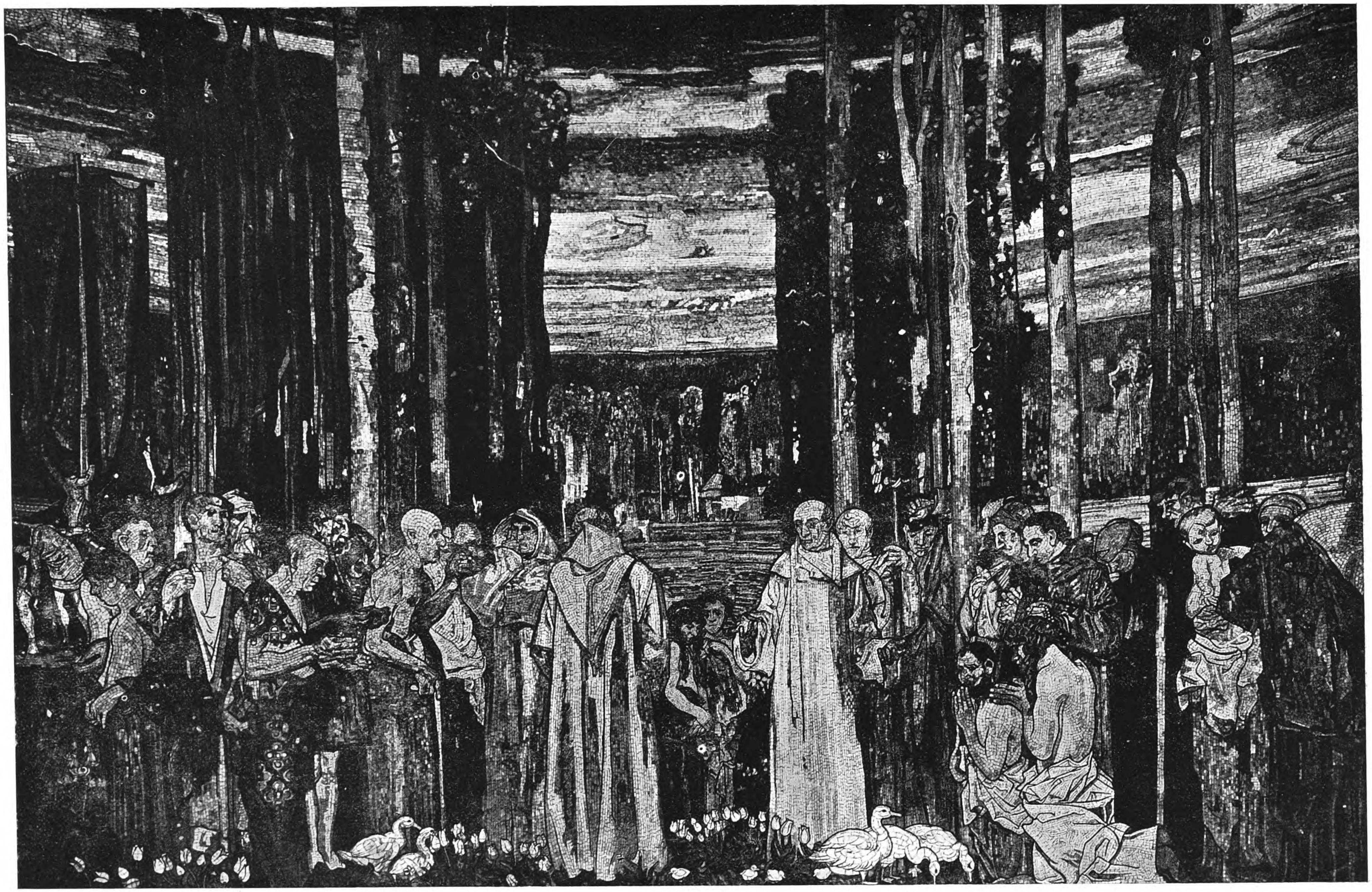
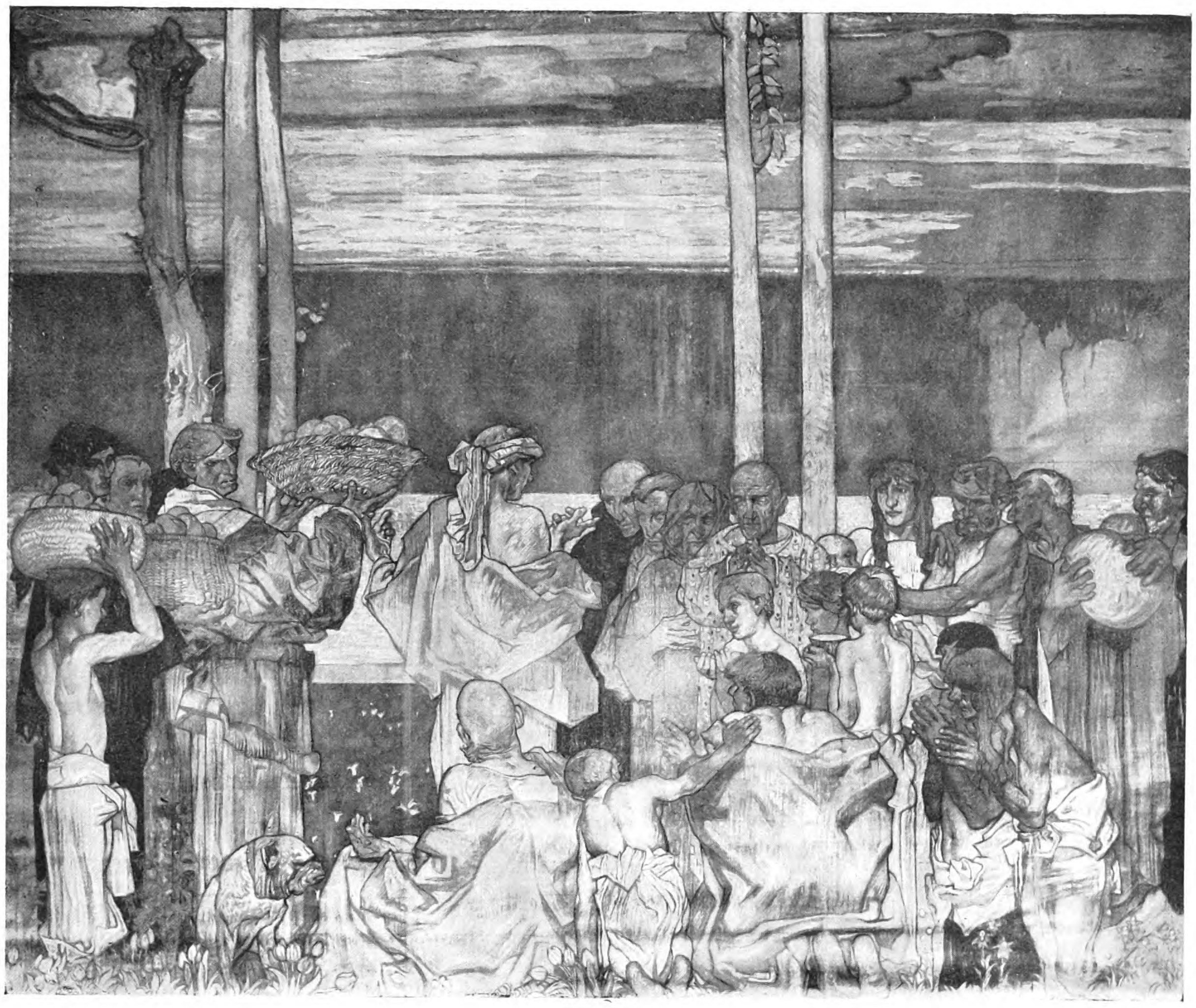


Plate II

November 1917.

MOSAIC DECORATION IN THE CHANCEL OF ST. AIDAN'S CHURCH, LEEDS: "ST. AIDAN PREACHING."

By Frank Brangwyn, A.R.A.



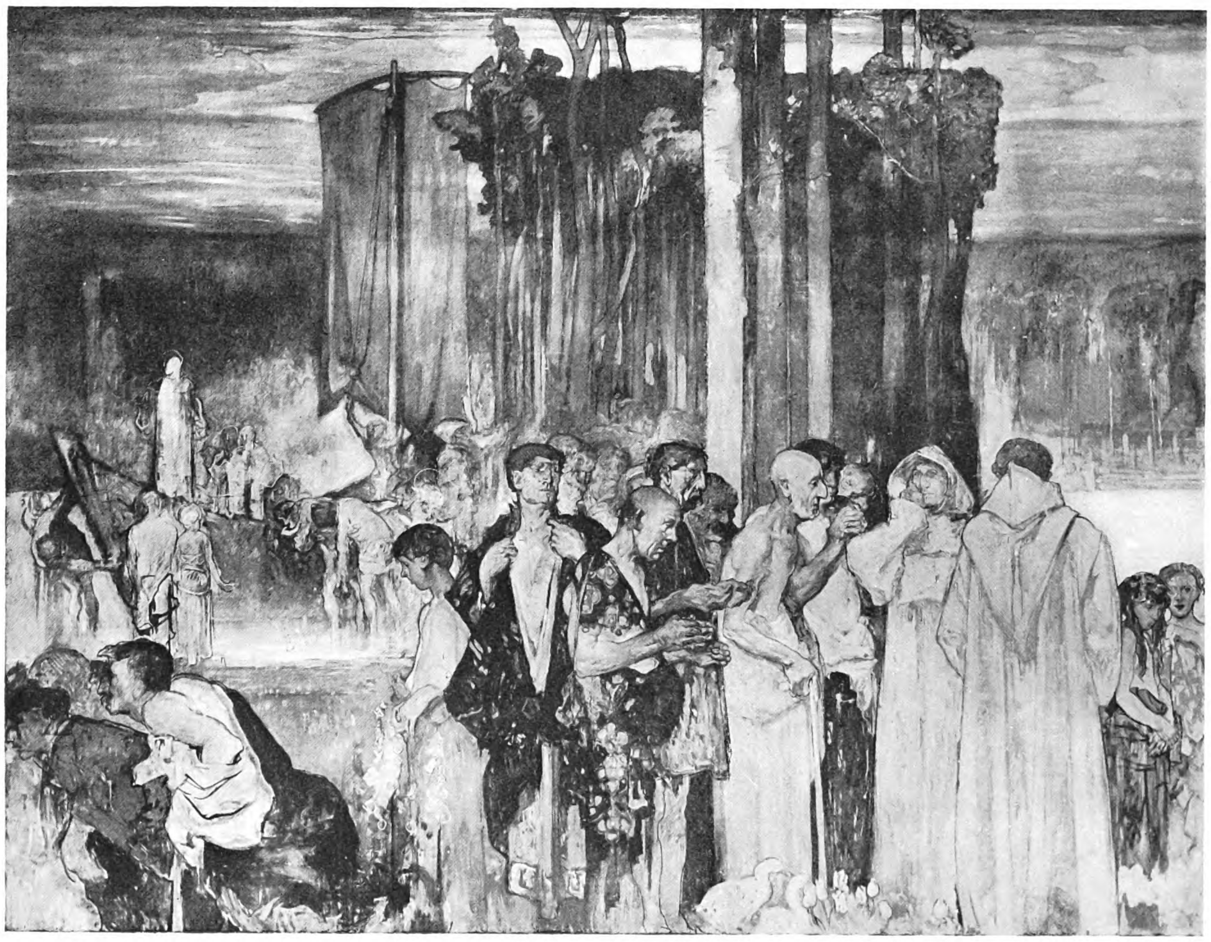
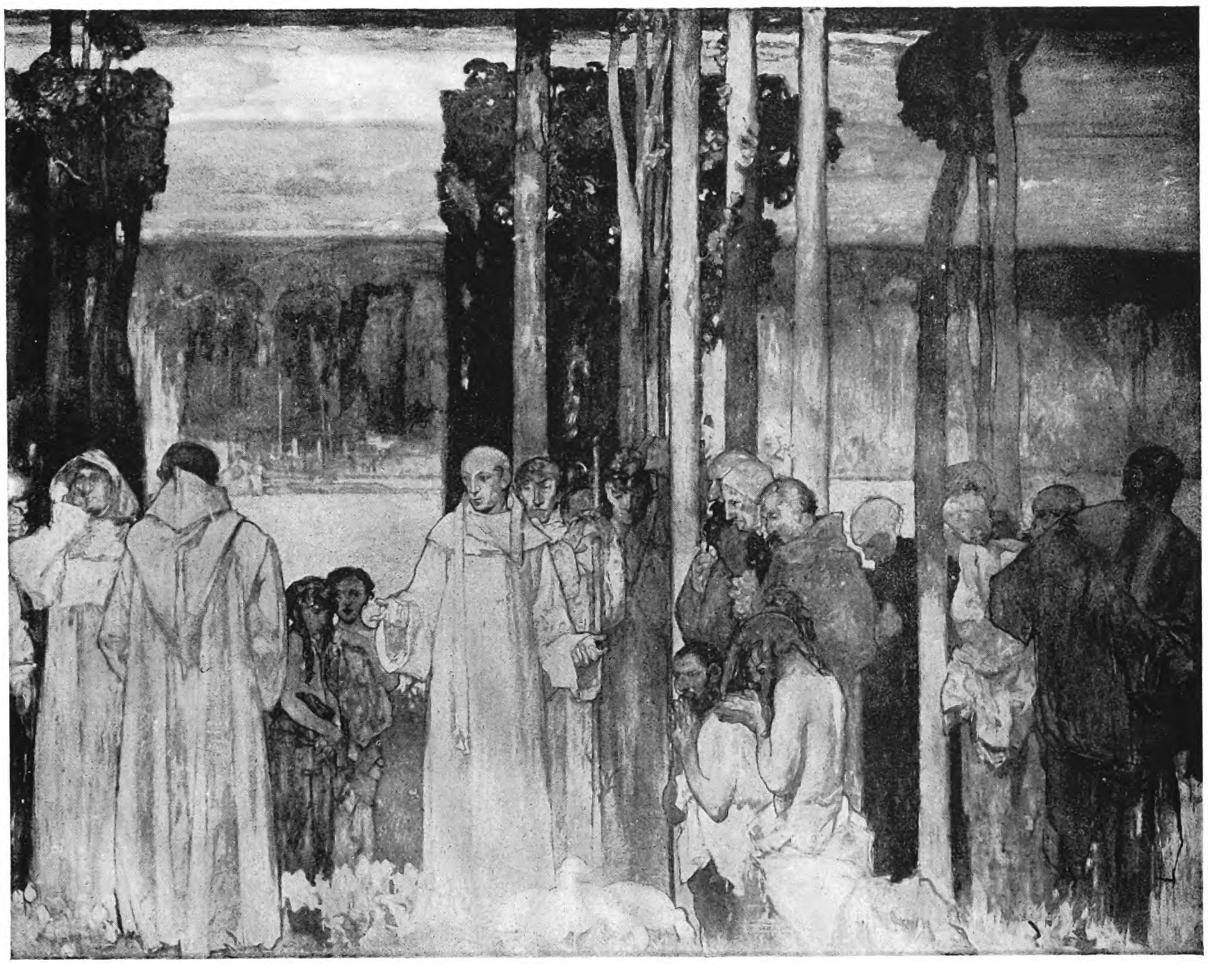


Plate III. November 1917.

ORIGINAL CARTOONS FOR MOSAIC DECORATIONS IN ST. AIDAN'S CHURCH, LEEDS.

By Frank Brangwyn, A.R.A.



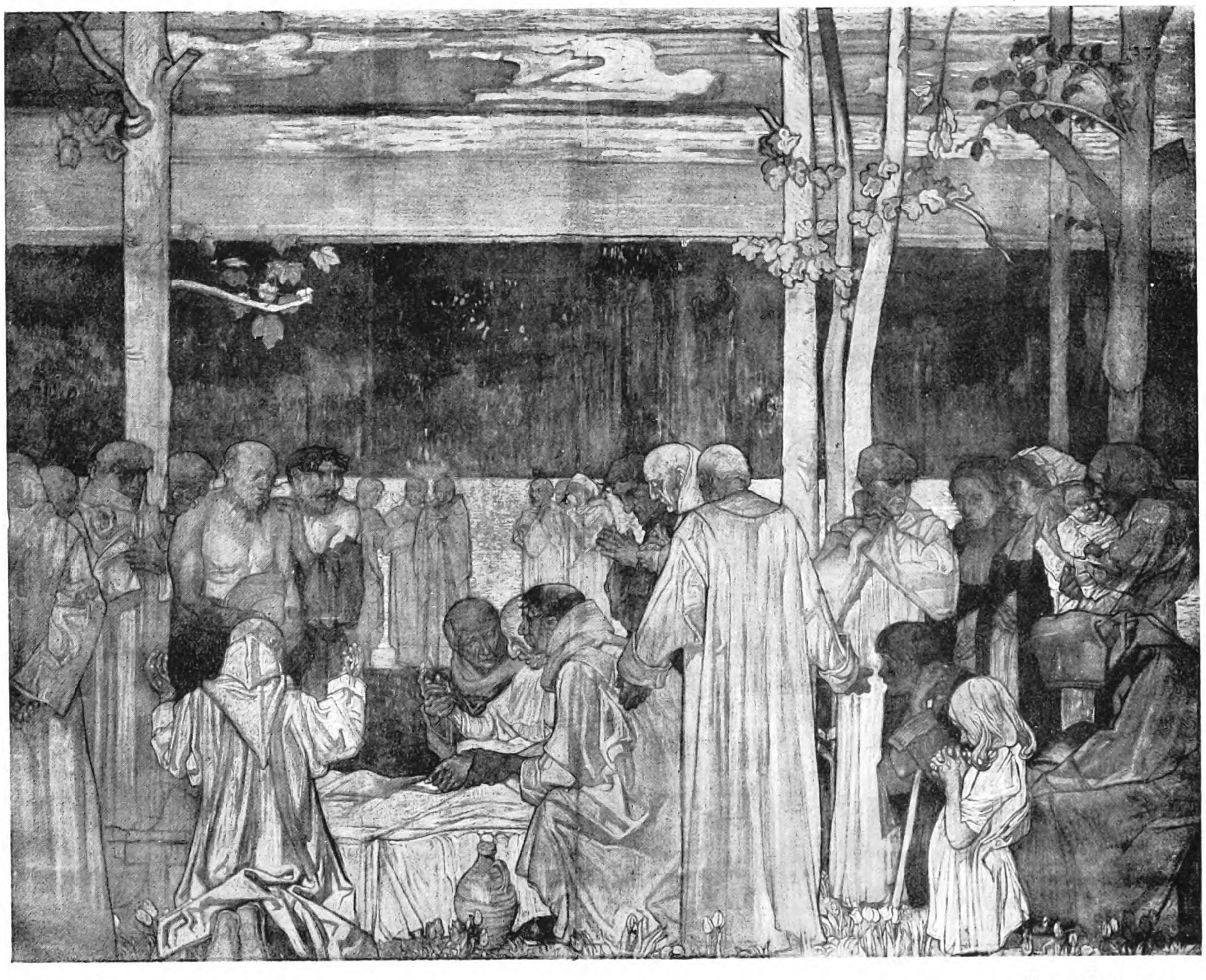


Plate IV. November 1917.

ORIGINAL CARTOONS FOR MOSAIC DECORATIONS IN ST. AIDAN'S CHURCH, LEEDS.

By Frank Brangwyn, A.R.A.

forms, and horizontals for skies to provide an expanding illusion, the figures appear restful in the glow of colour that is accentuated by their enamelled flesh tones. There are the rich reds of the cloaks of the two end figures in the central composition, the deep purple contrasted by white of the end figures of the left group, the variegated bright hues of the women's dresses, deep purple against white and red and orange speckled head-gear, contrasted and neutralized by the white robes of monks outlined against tinted grey of sail and the lighter grey and purple-tinted greys of the monks' robes, the occasional delicate blue and green hues of the draperies, completed by the whites of the tulips and geese against the conventional grey-green grass foreground effects, space fillings reminiscent of some ancient Roman mosaic work. Brangwyn has made great play with his arrangement of folds and draperies for effects of light and shade, as well as for linking up his many figures; particularly is this noticeable in the foreground group of the composition, "Feeding the Poor," of which a detail view is given (see p. 91).

It is impossible to do adequate justice in the space of one short article to the *verve* characteristic of the whole design, though the detail views reproduced of the original cartoons enable one to grasp its significance. There is no more masterly spacing in the design than in the whole treatment of the closing composition. Brangwyn knows well the value of simplicity both in the use of colour and of drawing to bring out the central *motif*, St. Aidan, in each composition, the white robe of the saint having the effect of making him the pivot of the design and the controlling unit therein. For individual fine types there is none better than the females forming the end composition and that of the listening monk in juxtaposition.

Careful workmanship is noticeable in the execution of the design, which has been carried out by Mr. H. Jesse Rust and staff at the mosaic works in Battersea in the material known as "Rust's Vitreous Mosaic." This material, not being so highly glazed as the modern Venetian mosaic tesseræ, has, in the opinion of many eminent artists, a more pleasing and a softer effect. In work of this kind it is still a matter of controversy whether the better effect is produced by carrying out the mosaic *in situ*, or working the design at the studio on a full-sized detail of the cartoons, reversed, which is cut up into sheets of suitable size, so that it can be easily handled for fixing with cement on the surface to be decorated, the mosaic being pieced together face downwards. The latter was the method employed in the work at St. Aidan's Church, thereby reducing the inconvenience of the scaffolding from at least twelve months to six weeks, and certainly reducing the cost. Still, the difficulty of working under such conditions is great; and in justice to the mosaic workers it is only due to say that it is little short of marvellous that the character of Brangwyn's types has been, on the whole, so well preserved.

THE NEW OFFICES FOR THE CROWN AGENTS FOR THE COLONIES.

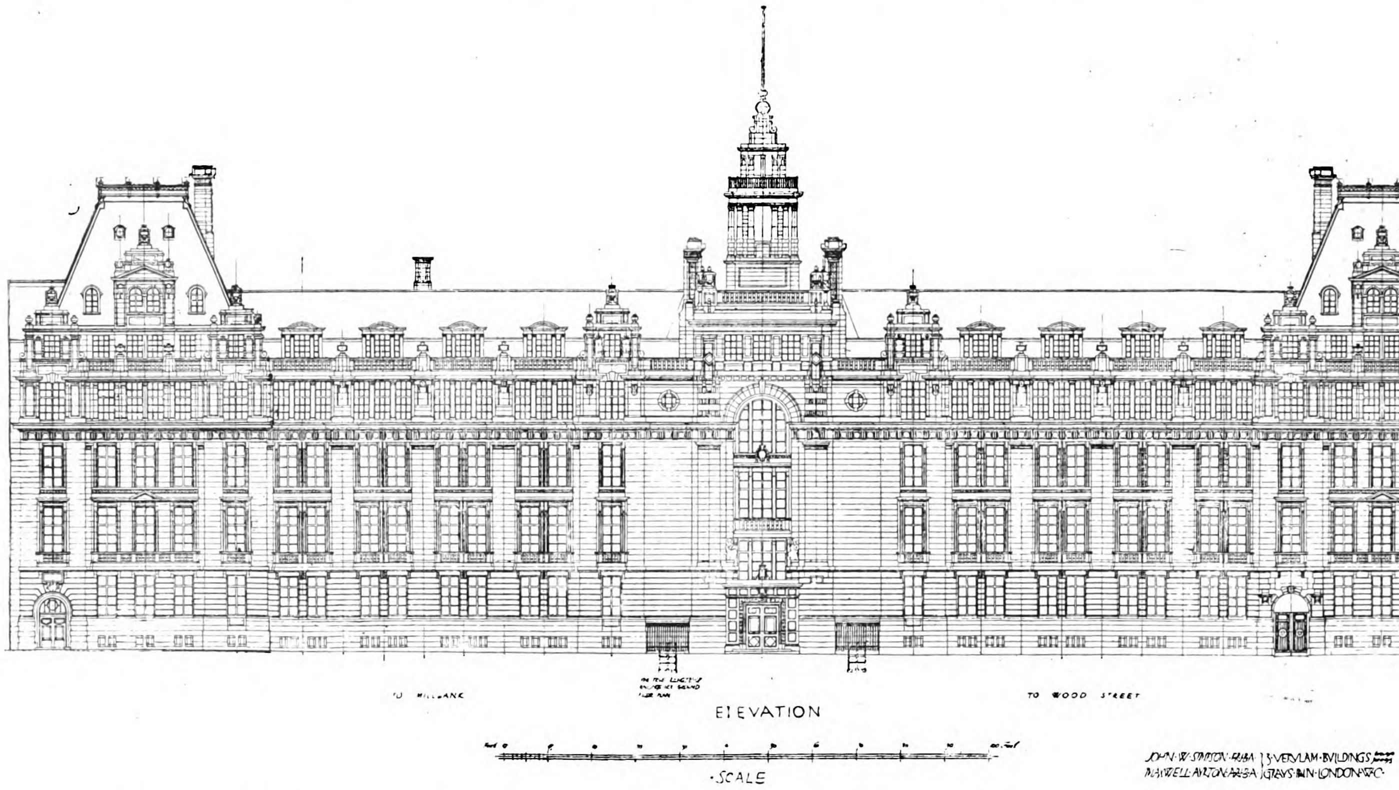
THE process of reconstruction which is ceaselessly at work in all parts of London seems at times to settle in some particular locality, which, sooner or later, becomes transformed beyond recognition. A change of this description is usually coincident with the creation of a new, or the widening of an existing, thoroughfare; and with it the disappearance of old familiar landmarks seems unhappily but almost necessarily involved. Kingsway, our most notable modern example, lost to us an intensely interesting, if somewhat squalid, sector of old London; but the improvement which it secured in London's north and south traffic communications may be said to have justified, or at least mitigated, the loss.

Many drastic changes have been wrought within recent times in the aspect of that area of Westminster which lies along the river bank between the Houses of Parliament and Vauxhall Bridge, particularly with regard to the embankment roadway itself, which (apt instance of our peculiar fondness for plurality in street nomenclature) is identified with the names Abingdon Street, Millbank, and Grosvenor Road. It was perhaps too much to expect that this roadway, rendered important by its close proximity to the Houses of Parliament and by the useful means of communication which it provides between north and south Westminster, should retain indefinitely its old-world charm. Indeed, by these characteristics alone, it seems to have been specially marked out for reconstruction.

Except for the huge and comparatively recent building for the Ecclesiastical Commissioners, Abingdon Street, the northern end of the embankment roadway, remains virtually as it was a century and more ago. Millbank, its continuation, has been widened and completely rebuilt within the last few years. At the point where it is touched by the now sadly decrepit Lambeth suspension bridge Millbank ends, and, beyond, the embankment roadway becomes Grosvenor Road, and changes into a picturesque survival of that older London which is so rapidly disappearing. With its cobbled roadway, its old riverside frontages, its wooden wharves and jetties, its mud banks and stranded barges, this part of Grosvenor Road has that fascinating sort of squalor which makes irresistible appeal to the eye of the artist. Already, however, at the Vauxhall Bridge end, a large section has been swept away; and the only reminder of Millbank penitentiary is its site, now occupied by the Tate Gallery.

It is upon the corner which is formed by the junction of Millbank with Wood Street that Messrs. John W. Simpson, F.R.I.B.A., and Flight-Lieutenant Maxwell Ayrton, R.N., A.R.I.B.A., have erected a fine building to accommodate the Crown Agents for the Colonies.

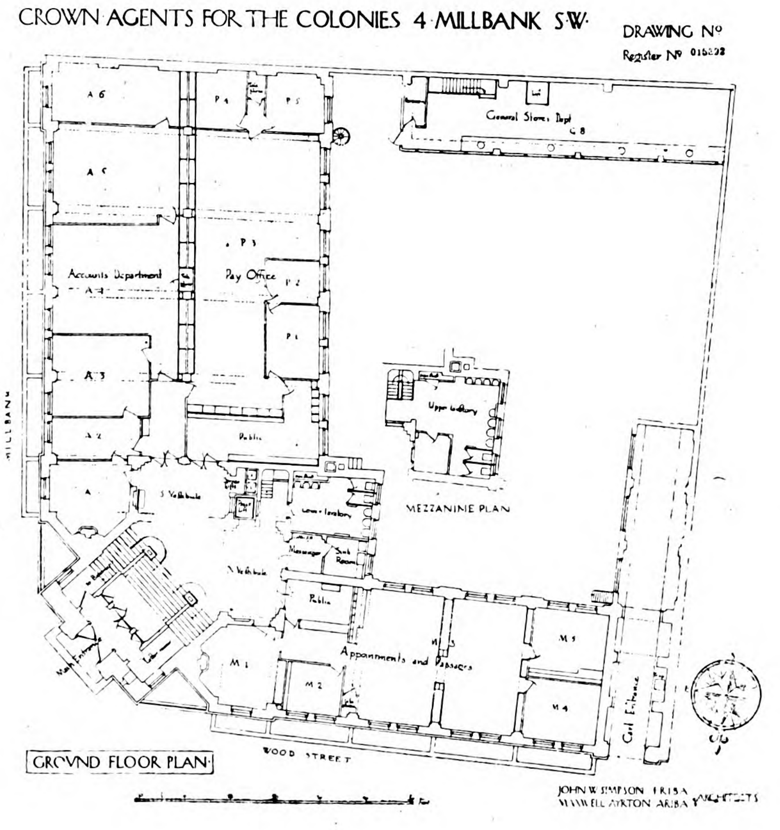
In this building the idea of the architects was to avoid as far as possible that conventional type of design which within recent years has hovered dangerously on the verge of the stereotype. "Government building" suggests, as to the exterior, long lengths of colonnaded elevations dotted over with pediments small and large, and other characteristic features from the architectural box of bricks; and, as to the interior, long stretches of corridor with a succession of rooms which, owing to the exigencies of working, can seldom be used to advantage. This sort of thing has been done so often that we are beginning to get just a little weary of it. Messrs.

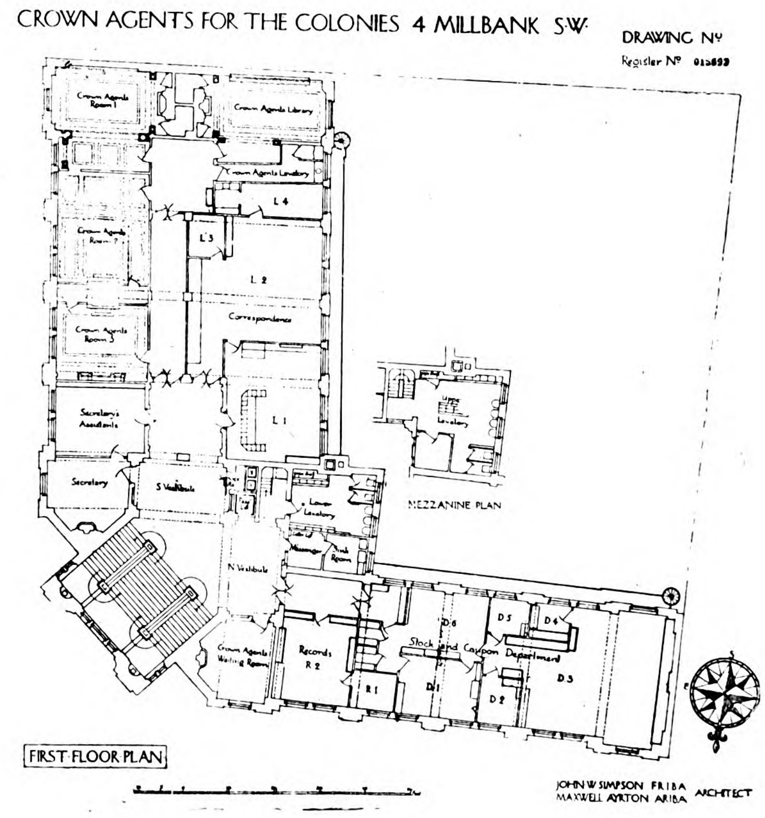

TO MILLBANK
TO WOOD STREET
ELEVATION
SCALE
JOHN W SIMPSON FRIBA 13 VERULAM BUILDINGS
MAXWELL AYRTON ARIBA GRAYS INN LONDON WC

Simpson and Ayrton's abandonment of the Government office tradition, therefore, is both timely and welcome. That they have made a considerable success of it will be apparent from an examination of the accompanying illustrations.

The site, though good, is not quite perfect, for the angle which is formed by the meeting of Millbank and Wood Street is slightly obtuse. This particular defect in a site is always somewhat detrimental to the appearance of elevations of buildings of a classical type, and various expedients to hide it have been employed from time to time. One of the most favoured, of course, is to curve the angle. The War Office in Whitehall, a building without a single external right angle, is an interesting example of this kind. Messrs. Simpson and Ayrton, however, have overcome the difficulty by cutting the angle off and making it an important feature in the design. Reference to the plan will show that the entrance hall and staircase are ingeniously accommodated in this angle, from which direct access is gained to the various offices contained in the two arms of which the plan is composed. It will be seen that there are no corridors in the commonly accepted sense of the term, the offices intercommunicating and being divided off one from another by glass partitions. The various departments, besides being self-contained, all converge upon the staircase and lifts; and interdepartmental communication is thus easy and direct. We may now turn our attention to the elevations.

The most striking view of the building is obtained as the spectator approaches it from the direction of the Houses of





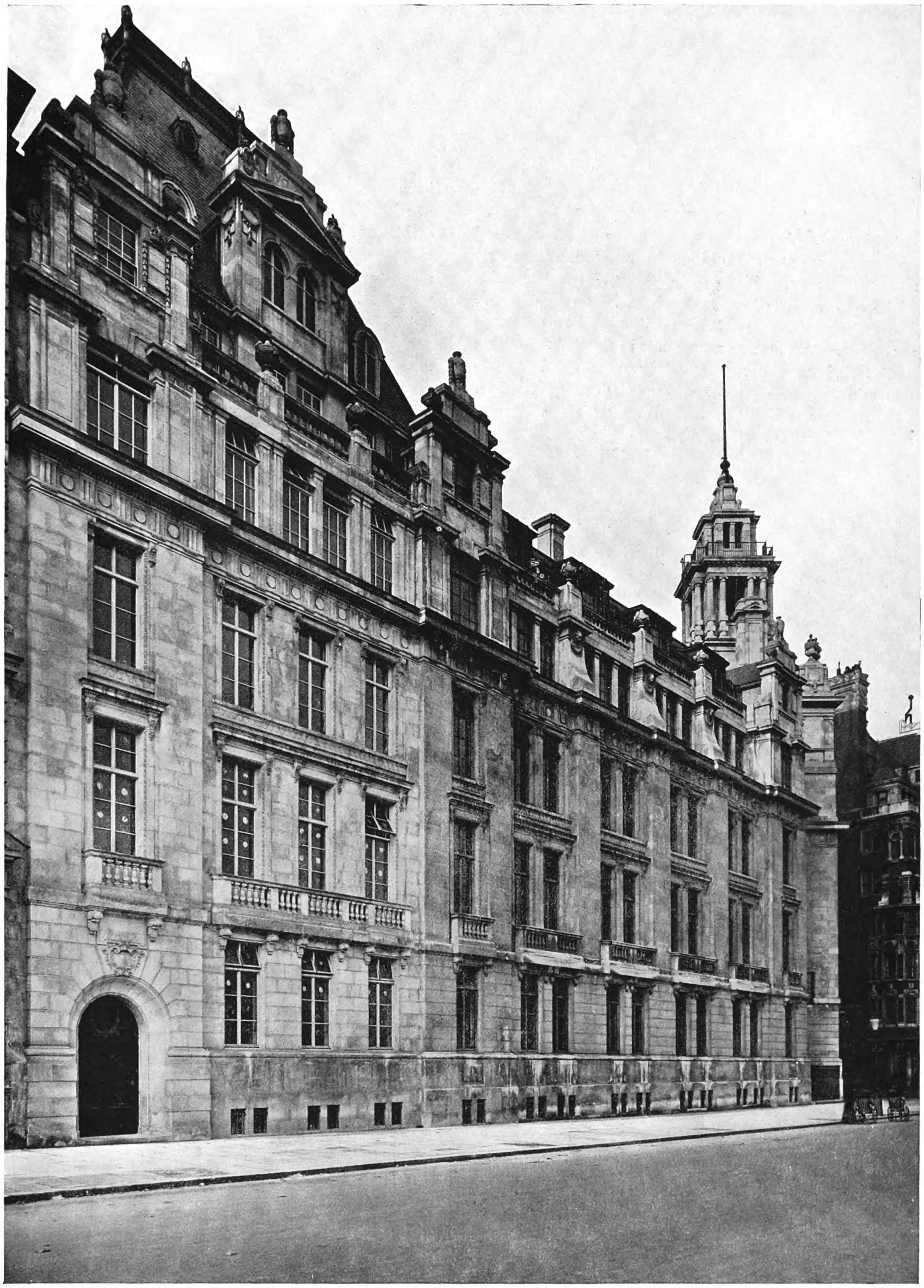


Plate V. November 1917. Photo: John H. Avery & Co.

NEW OFFICES FOR THE CROWN AGENTS FOR THE COLONIES, MILLBANK, WESTMINSTER.

John W. Simpson, F.R.I.B.A., and Flight-Lieutenant Maxwell Ayrton, R.N., A.R.I.B.A., Architects.

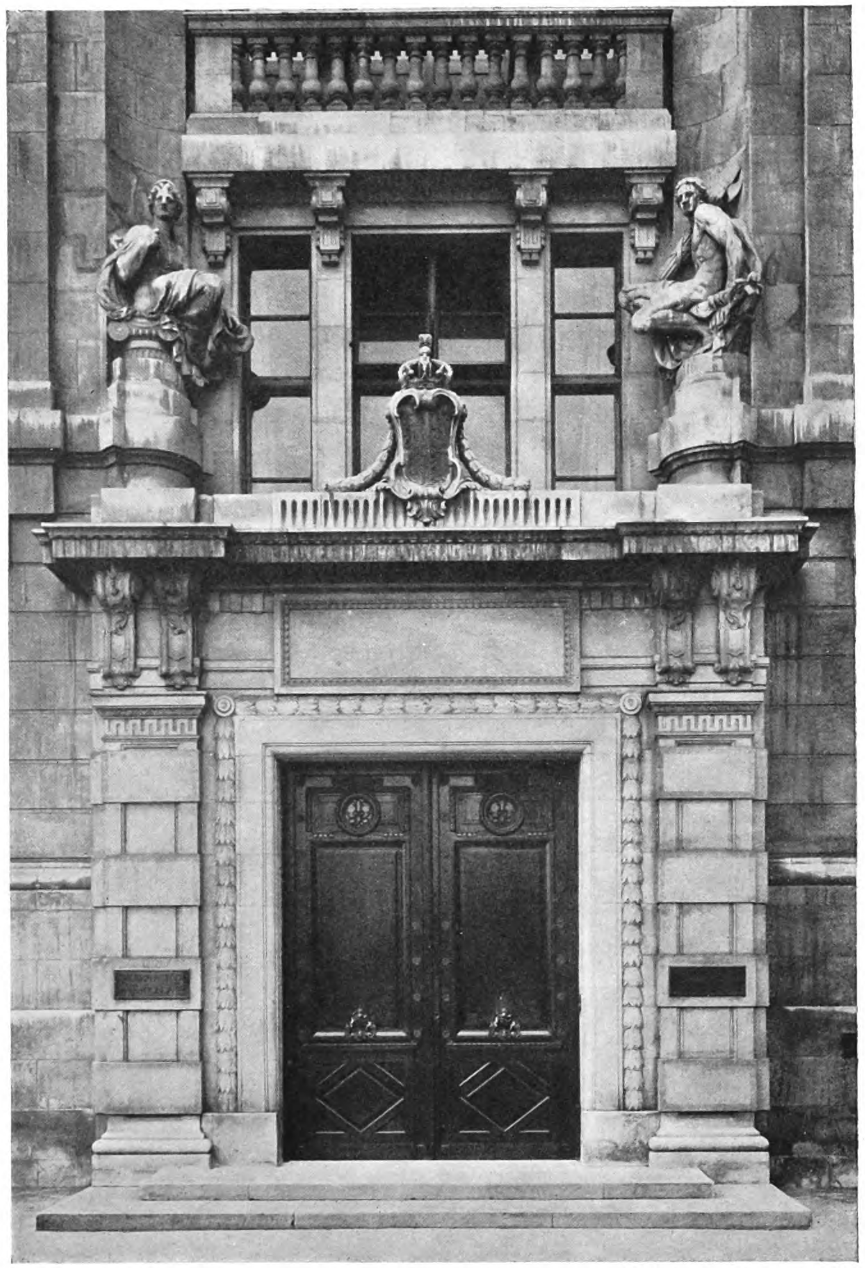
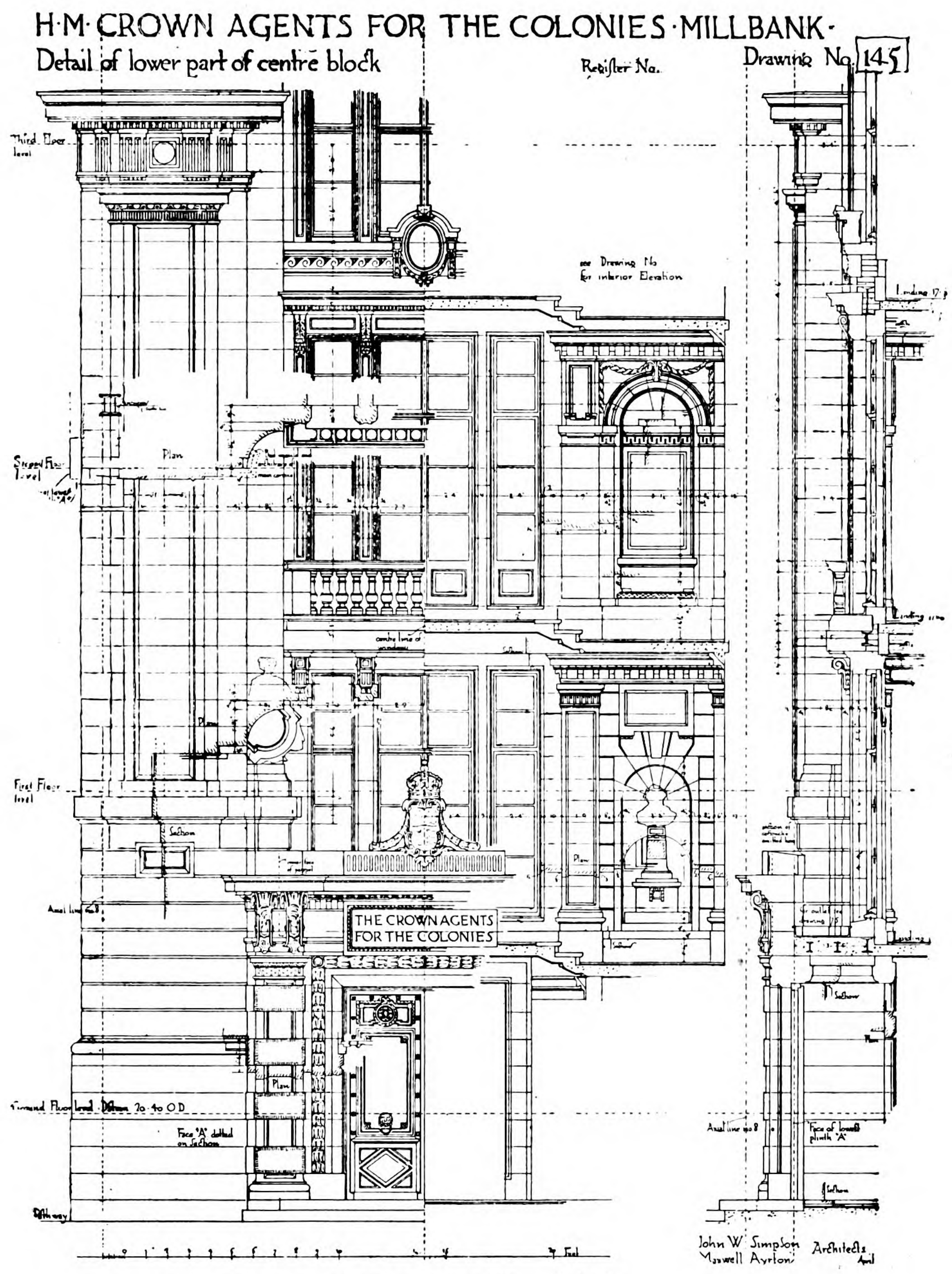


Photo: John H. Avery & Co.

Detail of Principal Entrance.



Detail of Lower Part of Angle.

NEW OFFICES FOR THE CROWN AGENTS FOR THE COLONIES, MILLBANK, WESTMINSTER.

John W. Simpson, F.R.I.B.A., and Flight-Lieutenant Maxwell Ayrton, R.N., A.R.I.B.A., Architects.

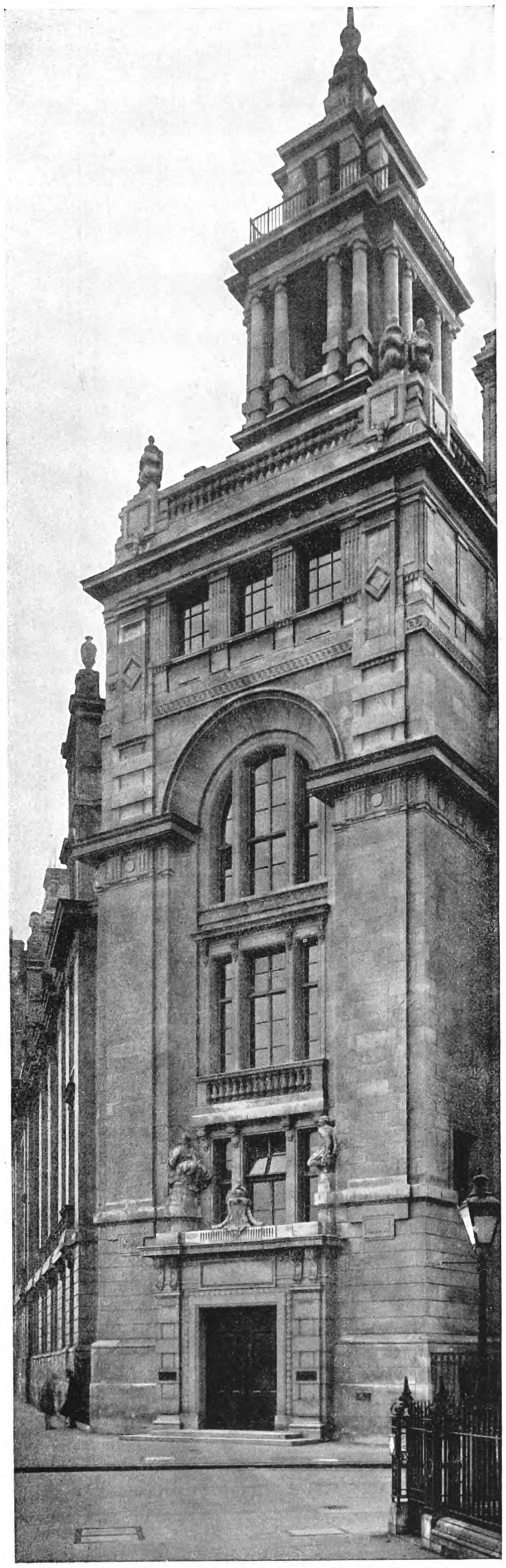
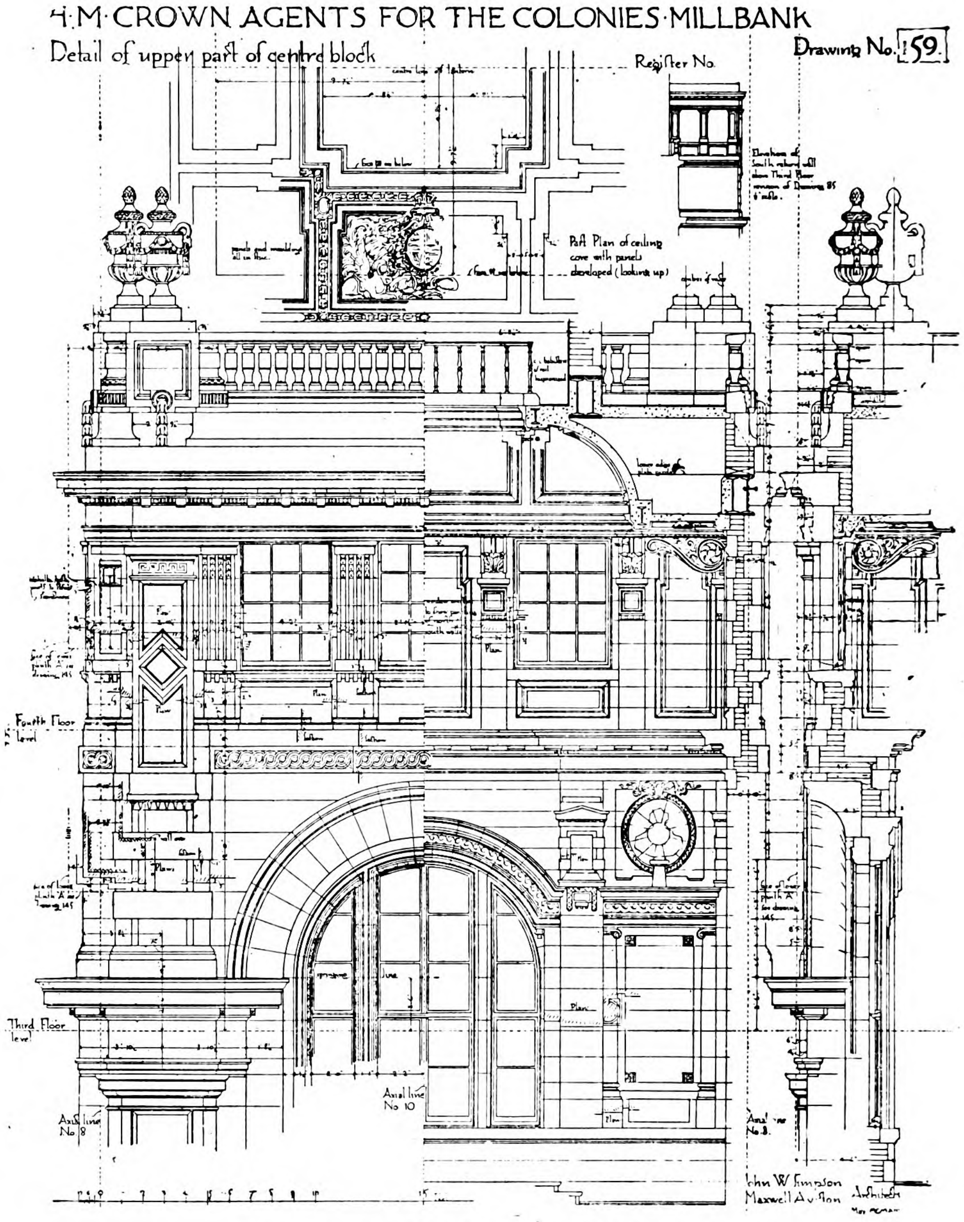


Photo: John H. Avery & Co.

DETAIL OF ANGLE.


H·M·CROWN AGENTS FOR THE COLONIES·MILLBANK
Detail of upper part of centre block
Register No.
Drawing No. 159
Part Plan of ceiling cove with panels developed (looking up)
Fourth Floor level
Third Floor level
Axial line No. 10
John W Simpson
Maxwell Ayrton
Architects

DETAIL OF UPPER PART OF ANGLE.

Parliament. The angle faces towards him, with its broad pilaster-like masses rising impressively on either side and embracing the windows which light the great staircase. Above the crowning arch is a bold horizontal mass, surmounted by a tower. Messrs. Simpson and Ayrton have surely made out a convincing case for the re-establishment of the much-maligned and generally discredited tower. In such an instance as this its use seems to be singularly appropriate; for it gives just the right emphasis to that part of the building which is the fulcrum of the whole scheme.

The principal entrance is filled with some well-designed mahogany doors, embellished with delicately chased bronze handles and with the letters C.A.C. (Crown Agents for the Colonies) worked into carved wreaths at the top of the panels. Over the entablature to the doorway are the Royal Arms, surmounted by a crown, while seated on pedestals on either side are some fine symbolic figures by Mr. Albert Hodge. That on the left is a female figure representing "Prosperity and Development, with the Attributes of Commerce, Health, and Education," while that on the right is a male figure representing "Administration, with the Attributes of Law and Order." These figures have the right architectonic character. They have nothing of the assertiveness that is a common fault of only too large a proportion of the sculpture on our modern buildings. They harmonize admirably with their architectural setting, and contribute considerably to the excellence of the total effect. This is the kind of work that we always expect from Mr. Hodge, who, of course, has had the advantage of a thorough architectural training.

The general elevations are well and effectively composed. There is, first, a plain base, then horizontal rustication up to the first-floor level, which is marked by balconies supported on small consoles. Above, and separating groups of double windows, rise broad pilasters to the third-floor level, terminating in abutment-like features decorated with lions' heads. Above, again, are decorative stone urns, between which, and partly concealing the slate-covered mansard roof behind, runs a balustrade. The frieze is marked by a continuous treatment of triglyphs and circles alternated. The view of the Millbank front reproduced on Plate V includes, on the left, a new addition to the building, which has just been completed. It will be noted that certain modifications in general treatment have been introduced, though in all its essential features it remains the same as the older part of the work. The entrance for vehicles is in Wood Street, the driveway sloping down to the loading yard, which is situated at basement level.

Internally, as already explained, the most important feature is the staircase, which, constructed throughout of Corsham Down stone on reinforced concrete, runs through the whole height of the building. It is a very dignified piece of work, upon which considerable care has been spent, particularly in the design of the wrought-iron balustrade, which, as may be seen in Plate VI, has for its principal *motif* the letters C.A.C. The niches in the staircase wall, one of which is visible in Plate VI, contain busts of Julius Cæsar and Augustus.

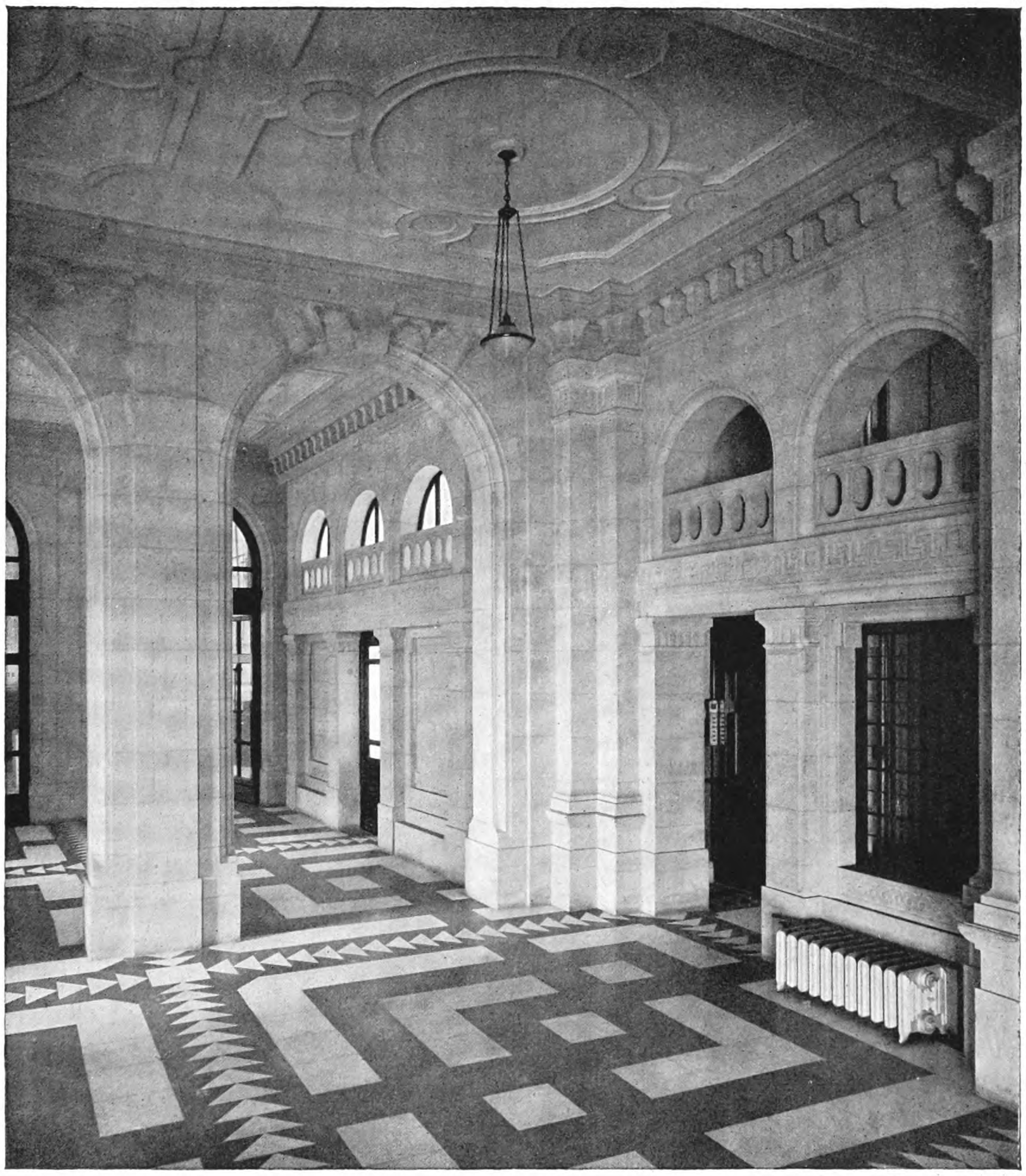


Photo: Cyril Ellis.

VIEW IN ENTRANCE HALL.

A fine and fitting culmination to the ascent is provided at the top of the staircase. Here we are immediately beneath the tower. This fine square space, with the staircase ascending in a broad flight from the landing below, and with its coved ceiling supported on finely modelled consoles above, is a veritable *tour de force*. It is splendidly lighted by the three windows high up on the external staircase wall, and a certain amount of light is also admitted through the lantern of the tower above. The cove itself is a particularly fine piece of modelling in stuc, containing the badges and emblems of the Crown Colonies. At the suggestion of the architects, it was signed with the name of the craftsman responsible for it, Mr. Stiles. All this work, together with the various cornices, soffits to stairs, panels, etc., was modelled in stuc by Messrs. G. Jackson & Sons, Ltd., of London, who also carried out in the same material the wall surface, cornices, etc., in the extension of the building. It is difficult to say at once which is the real stone and which the stuc, so exactly has the colouring and finished surface of the stone been imitated in the stuc work. We are informed that war-time restrictions prevented the importation of stuc from France; Messrs. Jackson & Sons were successful, however, in manufacturing a similar and perhaps better material in this country.

By far the most interesting rooms in the whole building are the offices of the Crown Agents, situated next to each other on the first floor, overlooking Millbank and the river. Their arrangement may be studied on the plan reproduced on page 94. All are characterized by a decorative scheme of very considerable refinement. The wall panels are coloured a delicate creamy-grey, lined around with a colour of a somewhat darker tone. Similarly, all have a white marble chimneypiece with an inner surround of black marble containing a black iron firegrate. The kerbs are all of white marble. All overmantels are fitted with mirrors in delicately designed bronze frames. The rooms differ from one another in architectural treatment in several important respects. Room No. 1 (see p. 100) is divided into two parts. The larger has a decorated coved ceiling on consoles, while the chimneypiece is distinguished by a flat-arched treatment over, supported by a column on either side. Two larger columns support a beam across, on the other side of which the ceiling is treated in a series of shallow coffers.

Room No. 2 (see p. 99) is also a fine apartment, though perhaps a little less elaborate in decorative treatment. The frieze, with its delicate key-pattern and oval medallion *motif*, is a charming piece of work. The small bronze vases on the mantelpiece add a delightful touch to the character of the room, and are typical of the thought and care which have been bestowed upon decorative detail throughout the building. A working drawing of these vases, reduced from the full size, is reproduced on this page.

Room No. 3 (see pp. 99 and 100), like No. 1, is also provided with a coved ceiling. One wall of the apartment is divided up into three arched recesses, supported by pairs of coupled columns. The bust in the centre arch is of the Athene from Pompeii. The whole scheme of this room is delightfully attractive. All three rooms, it may be added, have oak-block floors, solid mahogany doors and fittings, and French windows, and all are illuminated by electric light on the indirect principle.

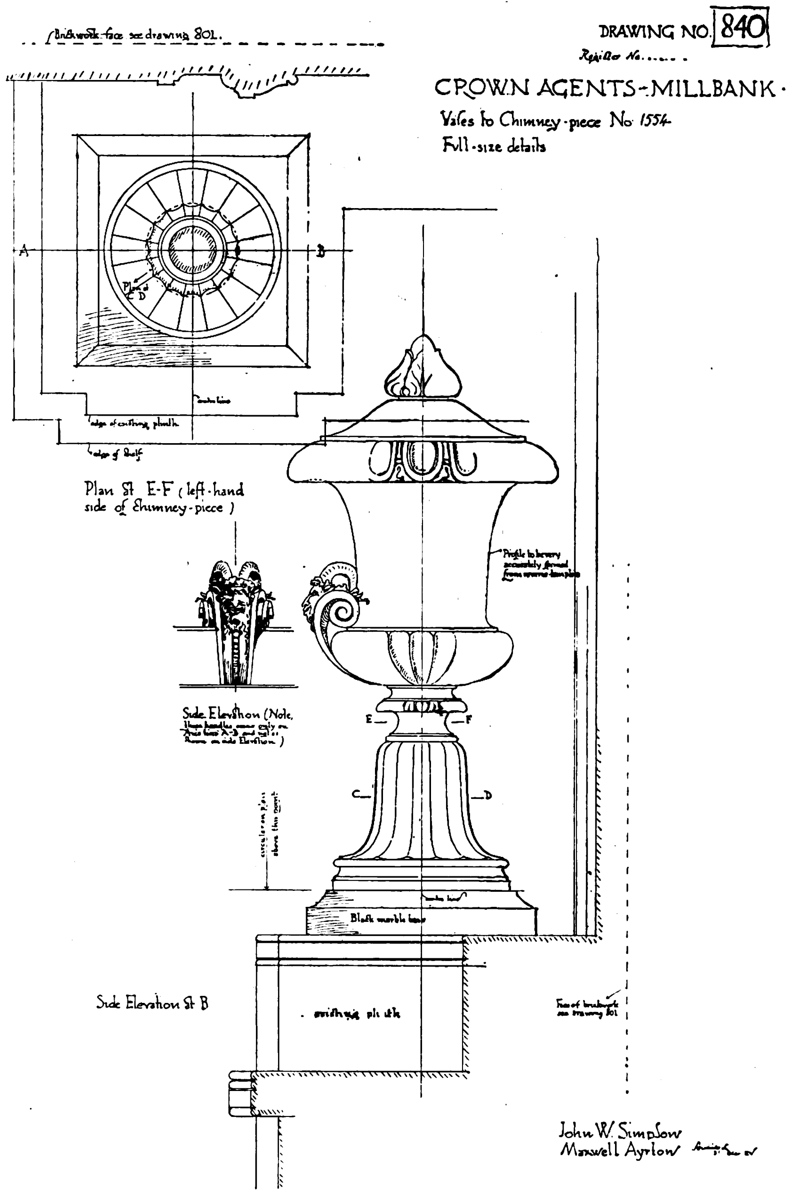
Thirteen "New System" intercommunicating telephones are installed throughout the building. They are fitted under contract on the "New System" rental basis, which carries with it an all-time guarantee of efficient working, together with free maintenance, repairs, and renewals. This installation connects up some of the essential departments in the Crown Agents' organization, and was supplied by the New System Private Telephone Company, Ltd., of London.

The carved statuary marble chimneypiece for the High Commissioner's room, the other marble chimneypieces in the main building, together with the paving in statuary and Belgian block marbles to all six floors, were supplied and fixed by Messrs. J. Whitehead & Sons, Ltd., of London.

Messrs. Carter & Co., Ltd., London, carried out a considerable quantity of tiling in the lavatories, kitchens, and elsewhere. A large proportion of this work had to match the glazed partition bricks used in the construction. So close is the match in size, colour, and jointing, that it is impossible to distinguish any difference between the two.

The electric wiring throughout the building was carried out by Mr. V. G. Middleton, of Westminster, who also supplied the electric bells. The electric fittings, supplied by the British Thomson-Houston Co., Ltd., of London, are mostly of the standard "Eye-rest" type. Those used in the private offices, also the large fitting at the top of the staircase, were specially made up from designs prepared by the company, and approved by the architects.

The building, which worked out at the remarkably low cost of 1s. 2d. per foot cube (inclusive of heating and of electric-lighting mains, but not of furnishing and special fittings), is constructed generally of brick and stone, Whitbed Portland for the exterior and Corsham Down for the internal work. The floors and the flat mansard roofs are fire-resisting throughout, and were executed on their hollow-brick system by Messrs. Homan and Rodgers, of London, who also were the engineers for the constructional steelwork and reinforced concrete to the retaining walls, courtyard raft, staircases, etc. The floor to the entrance hall and the corresponding space on the higher levels are laid with black and white marble tiles. The building contains on the top floor its own canteen and kitchen arrangements. The whole of the gas cooking equipment in the



DETAIL OF BRONZE VASE IN CROWN AGENT'S ROOM NO. 2.

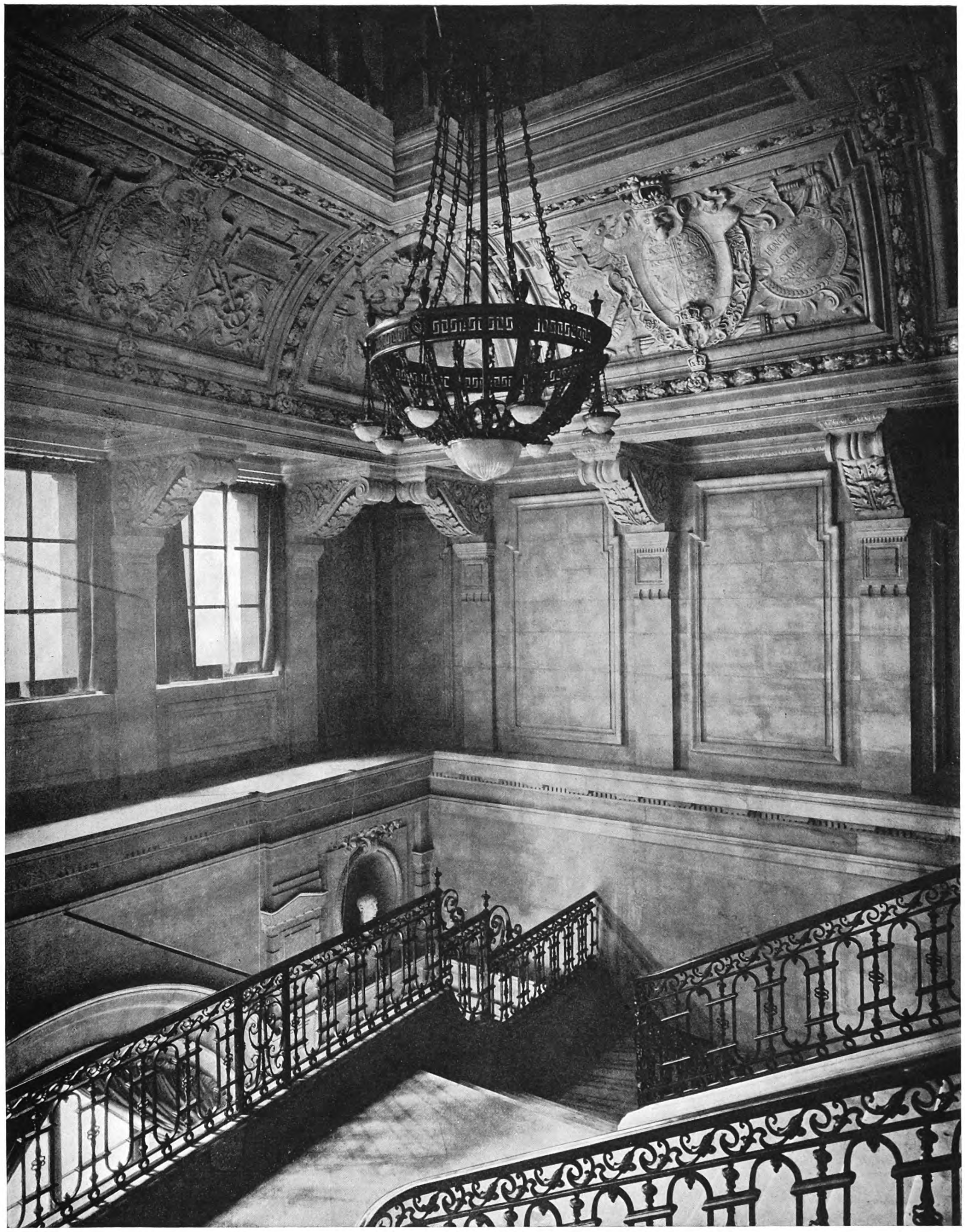
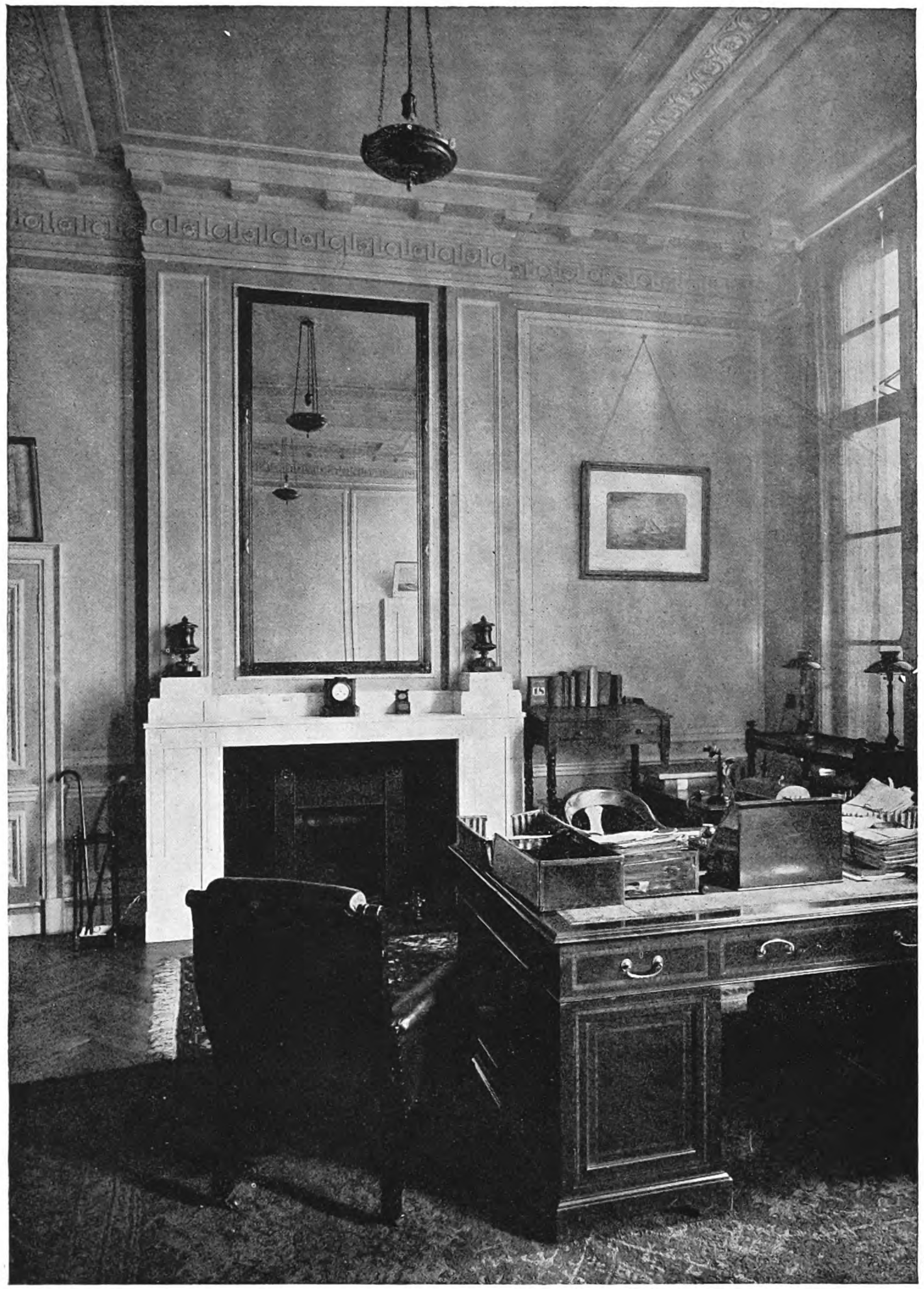


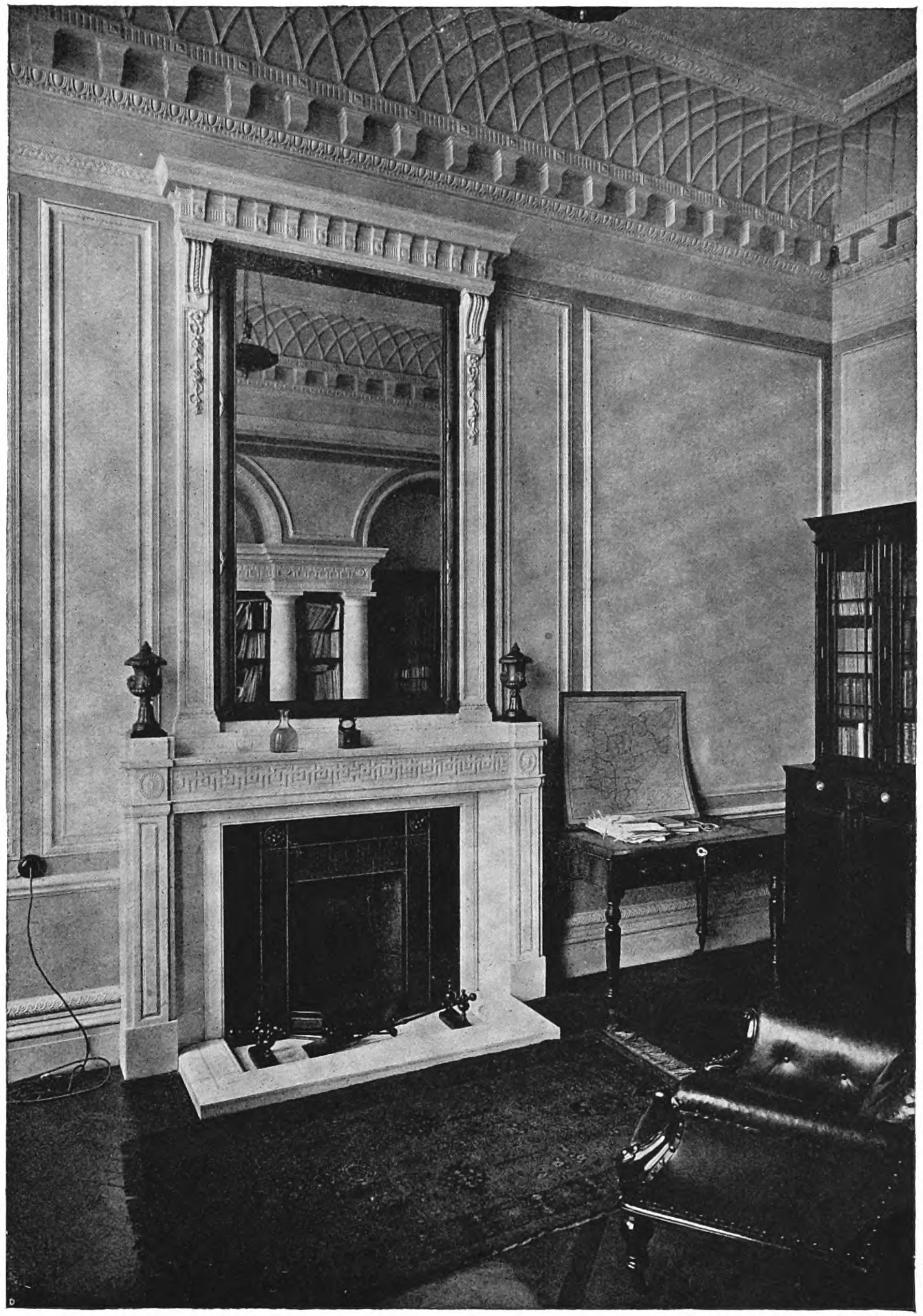
Plate VI. November 1917. Photo: John H. Avery & Co.

NEW OFFICES FOR THE CROWN AGENTS FOR THE COLONIES, MILLBANK, WESTMINSTER: VIEW FROM STAIRCASE LANDING.

John W. Simpson, F.R.I.B.A., and Flight-Lieutenant Maxwell Ayrton, R.N., A.R.I.B.A., Architects.



Crown Agent's Room No. 2.

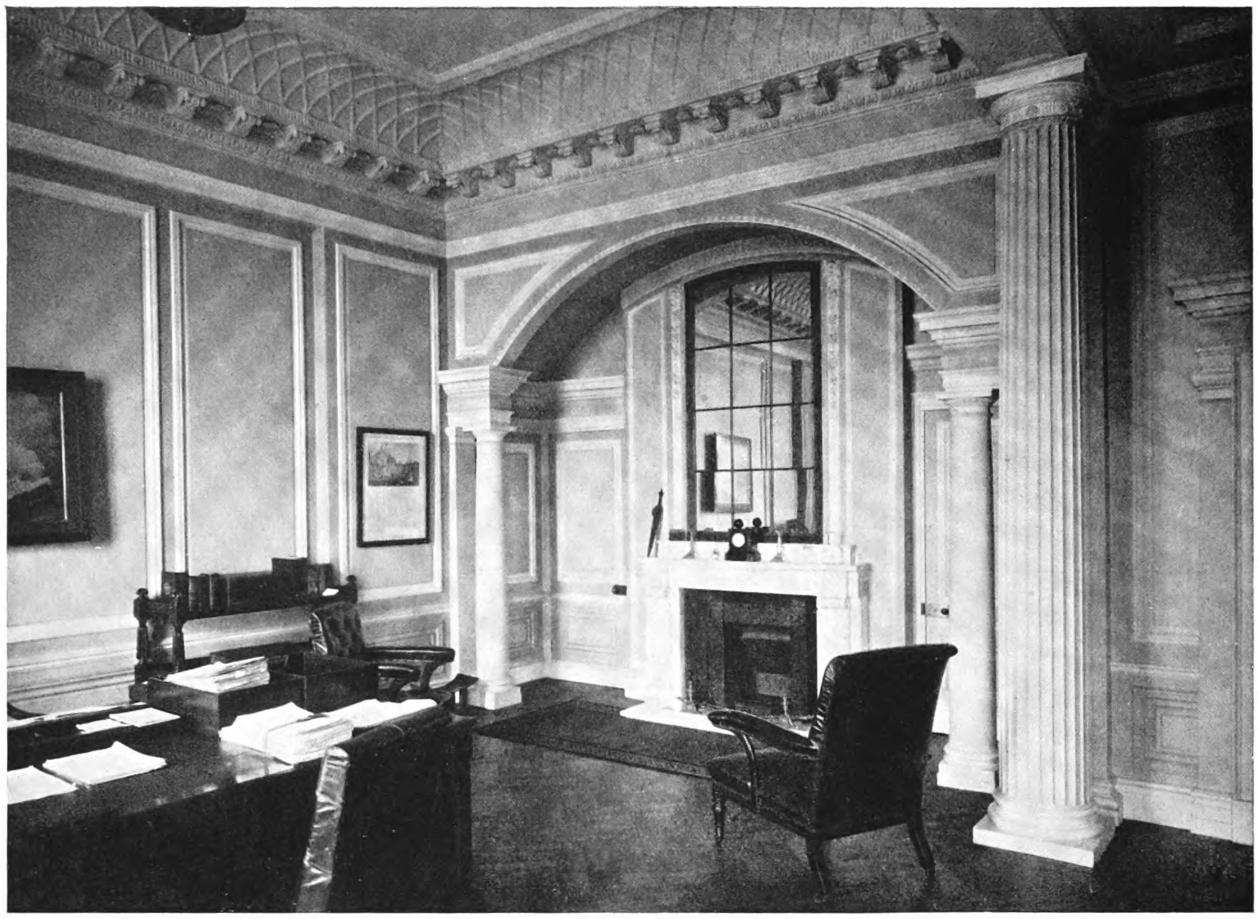


Crown Agent's Room No. 3.

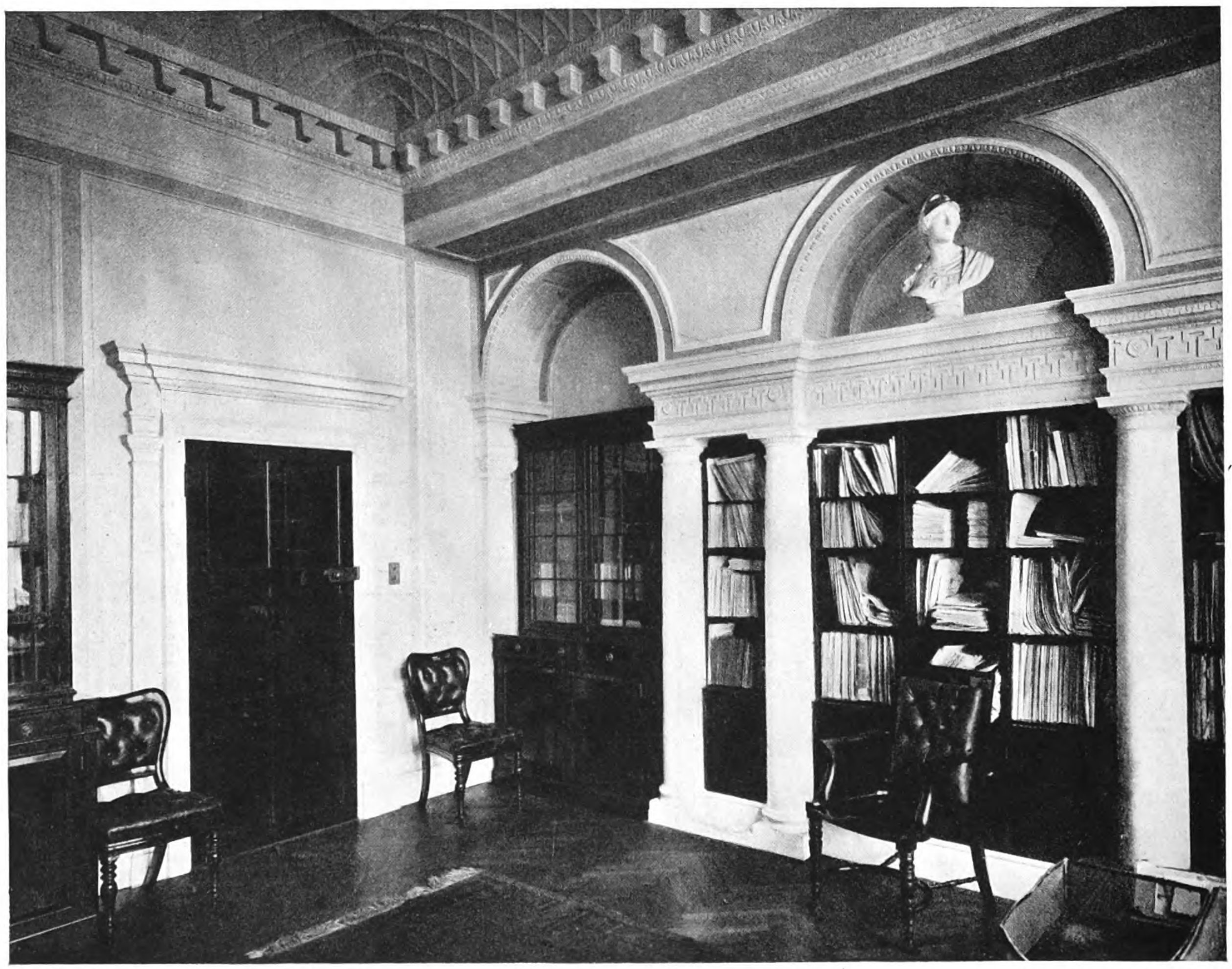
Photos: John H. Avery & Co.

NEW OFFICES FOR THE CROWN AGENTS FOR THE COLONIES, MILLBANK, WESTMINSTER.

John W. Simpson, F.R.I.B.A., and Flight-Lieutenant Maxwell Ayrton, R.N., A.R.I.B.A., Architects.



Crown Agent's Room No. 1.



Photos: John H. Avery & Co.

Wall Treatment, Crown Agent's Room No. 3.

NEW OFFICES FOR THE CROWN AGENTS FOR THE COLONIES, MILLBANK, WESTMINSTER.

John W. Simpson, F.R.I.B.A., and Flight-Lieutenant Maxwell Ayrton R.N., A.R.I.B.A., Architects.

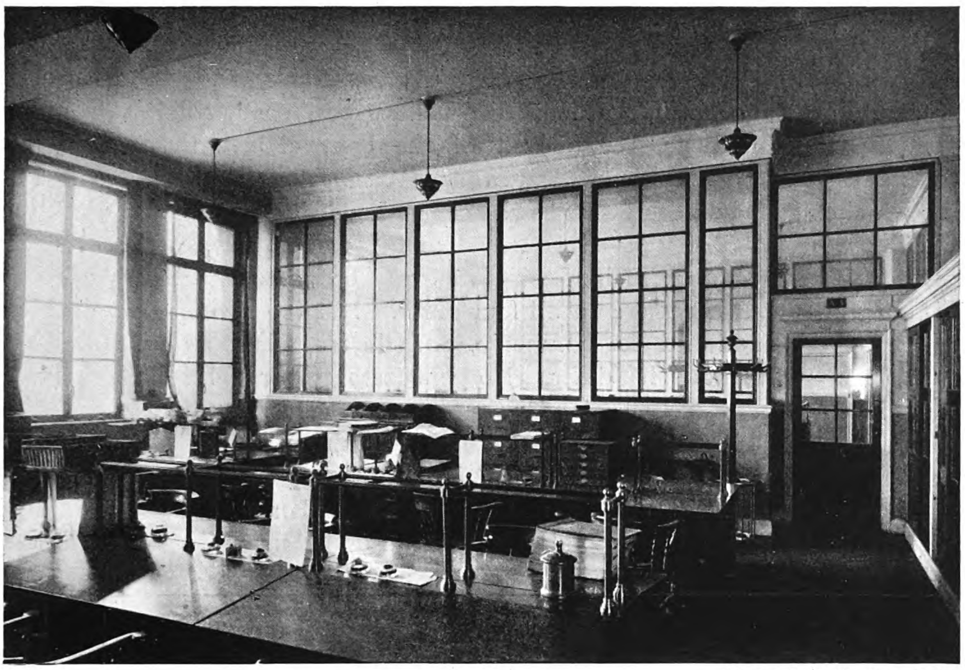


Photo: John H. Avery & Co.

A TYPICAL OFFICE INTERIOR.

kitchen was supplied by The Richmond Gas-stove and Meter Co., Ltd., of London, and embraces the following units:—(1) One large central cooking range, consisting of four ovens, with liberal boiling and grilling accommodation on top; (2) one large "double-decker" pastry oven; (3) two massive "Whitehall" roasting ovens, each measuring 6 ft. high by 2 ft. 3 in. wide by 3 ft. deep; (4) two boiling tables, each erected on stand, and measuring over all 6 ft. long by 2 ft. 6 in. wide by 2 ft. 9 in. high, and 6 ft. long by 2 ft. deep by 2 ft. 9 in. high, respectively; (5) one large griller on stand, fitted with warming closet on top, and measuring 2 ft. 9 in. wide by 1 ft. 9 in. deep over all; (6) one pastry table measuring 3 ft. 3 in. wide by 1 ft. 9 in. deep by 2 ft. 9 in. high.

The kitchen was equipped with steam-heated cooking apparatus by Messrs. McDowall Steven & Co., Ltd., of London. Vegetables and soups are cooked in the series of steam-jacketed pans and in the battery of six steaming chambers. A special feature of this battery is the patent steam control valves which release the pressure inside the chambers before the doors can be opened, thus obviating the risk of burns from the steam in the chambers. Messrs. Revy Phillips & Co., Ltd., of London, supplied the "Reliance" automatic boiling water apparatus, the "Universal" automatic toasters, and the Revy patent silent direct steam heaters.

Messrs. Holliday and Greenwood, Ltd., of London, were the general contractors for the building, and among the sub-contractors were: Messrs. Bratt, Colbran & Co. (stoves and grates); Messrs. Waygood-Otis, Ltd. (lifts and cranes); Messrs. Art Pavements and Decorations, Ltd. (marble chimneypieces).

Other sub-contractors were: Messrs. Val de Travers Asphalte Paving Co., Ltd.; Messrs. Frederick Jones & Co., Ltd.; Mr. J. Gibbons; Messrs. Helliwell & Co., Ltd.; Messrs. Shanks & Co., Ltd.; Messrs. Tylor and Sons, Ltd.; Messrs. Turpin's Parquet Floor, Joinery, and Wood Carving Co.; Mr. C. Kerridge; Mr. E. Norkett; Messrs. The Birmingham Guild, Ltd.; Messrs. The Bostwick Gate and Shutter Co., Ltd.; Messrs. J. Jeffreys & Co., Ltd.; Messrs. R. Anderson & Co.; Messrs. The Imperial Machine Co.; Messrs. Le Grand and Sutcliffe; Messrs. Burnet & Co., Ltd.

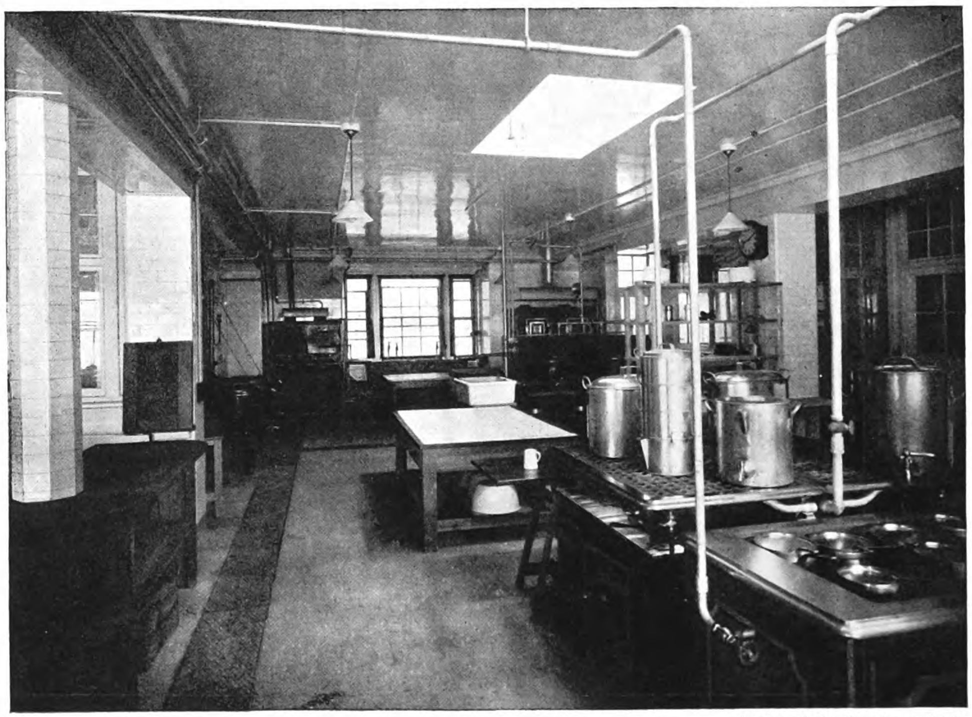


Photo: John H. Avery & Co.

VIEW IN KITCHEN.

THE HOUSING PROBLEM: COMPETITIONS FOR DESIGNS.

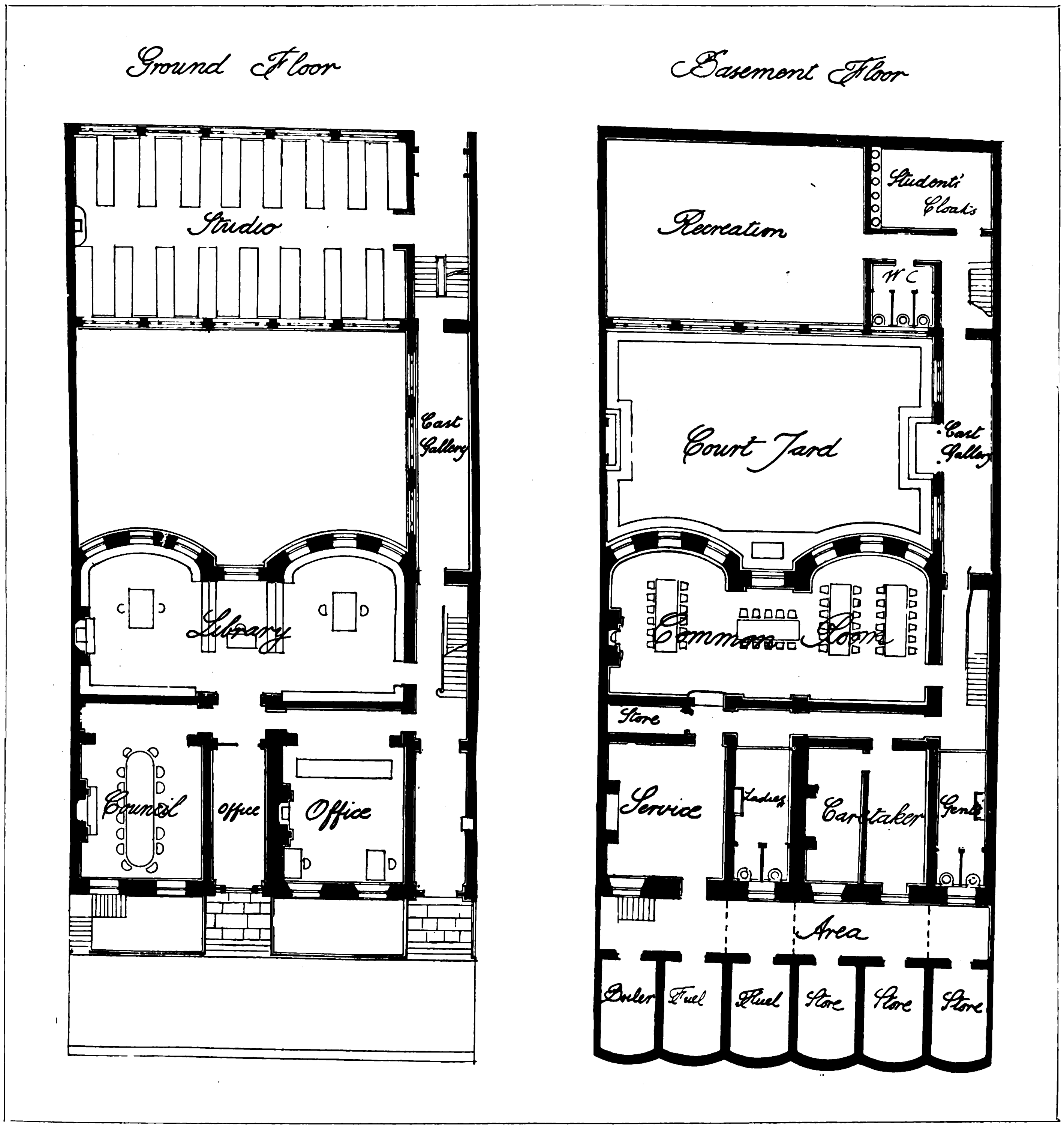
In the course of his Presidential Address to the R.I.B.A., on Monday, 5 October, Mr. Henry T. Hare made an important statement with respect to the housing problem and the part which the Institute is to play in its solution. We know only too well, he said, that the conditions under which they (the working classes) live in most cases are indeed deplorable, and any material amelioration has seemed almost hopeless under the complicated conditions and restrictions which have fenced round the problem. . . . I am pleased to say that the Local Government Board has approached the Institute, and invited our co-operation in securing the best possible plans for the houses which are to be erected in large numbers immediately after the War. They have placed at our disposal an adequate sum of money for procuring these designs, and we have drawn up a scheme for instituting a series of competitions throughout England and Wales. These are to be conducted by the R.I.B.A. and its allied societies, who have entered into the scheme with great enthusiasm, and there is every reason to believe that a very satisfactory result may be arrived at. Many serious problems arise in the preparation of these designs. Not only is it essential that the houses should be healthy and comfortable, sufficiently segregated, pleasant to look at and live outside of as well as inside, and as varied in design as may be practicable, but they must take into account the necessity of the most rigid economy, and the serious shortage of many building materials hitherto regarded as essential. The use of the latter must be minimized, and substitutes designed and arranged for so far as may be possible. Apart from the question of these competitions, the Institute has a very strong committee sitting which is considering how the interests of architects and, as we firmly believe, the interests of the public as well may best be safeguarded in the carrying out of these extensive schemes of housing.

THE ARCHITECTURAL ASSOCIATION'S NEW PREMISES IN BEDFORD SQUARE.

TWO or three months ago the Architectural Association finally abandoned their temporary premises in Great Smith Street, Westminster, having acquired the leases of the two houses, Nos. 34 and 35 Bedford Square, in which to carry on their work of architectural education. These houses are quite excellent examples of late-eighteenth-century domestic architecture; and, if the influence of environment counts for anything at all, they should act as a considerable stimulus to architectural study. In these pages, by the courtesy of the "A. A. Journal," we are able to reproduce a number of most interesting illustrations of the houses, together with some notes thereon.

Bedford Square is the most complete of the London squares, and the least spoilt of the West Central group, with a beautiful garden, fine plane trees, good, solid, respectable buildings, reminiscent of the later eighteenth century, not over-ambitious nor tawdry. Artificial-stone doorways it has, and stucco fronts to the centre buildings, but treated frankly as stucco; not over-sized like Fitzroy Square, with ambitious architecture half-completed and ornament stuck on with glue, but complete on all four sides. Not too severely classical nor sacrificed to symmetry, a little irregular; its balconies and details all differ. No unnecessary or false ornament: a restrained design by a lesser eighteenth-century architect (Thomas Leverton, about 1780), not yet puffed up with the pride of the Brothers Adam.

Built upon a rubbish heap, a timber yard, sundry ditches, and a horse-pond, with trustful optimism and poor materials,



PLANS OF NOS. 34 & 35 BEDFORD SQUARE, LONDON, SHOWING PROPOSED ALTERATIONS.

the square shares with its contemporaries the defects of over-speculation. No better nor worse in that respect, it beats them in its quiet, reposeful, serene respectability, its colony of modern architects notwithstanding.

In the days when the nobility washed seldom and entertained often, the houses reflect in their immense reception-rooms and mean bedrooms the domestic comfort of the times. Servants slept anywhere—goodness only knows where, the men servants on truckle beds in the basement—washed at the sink, and fed in the kitchen.

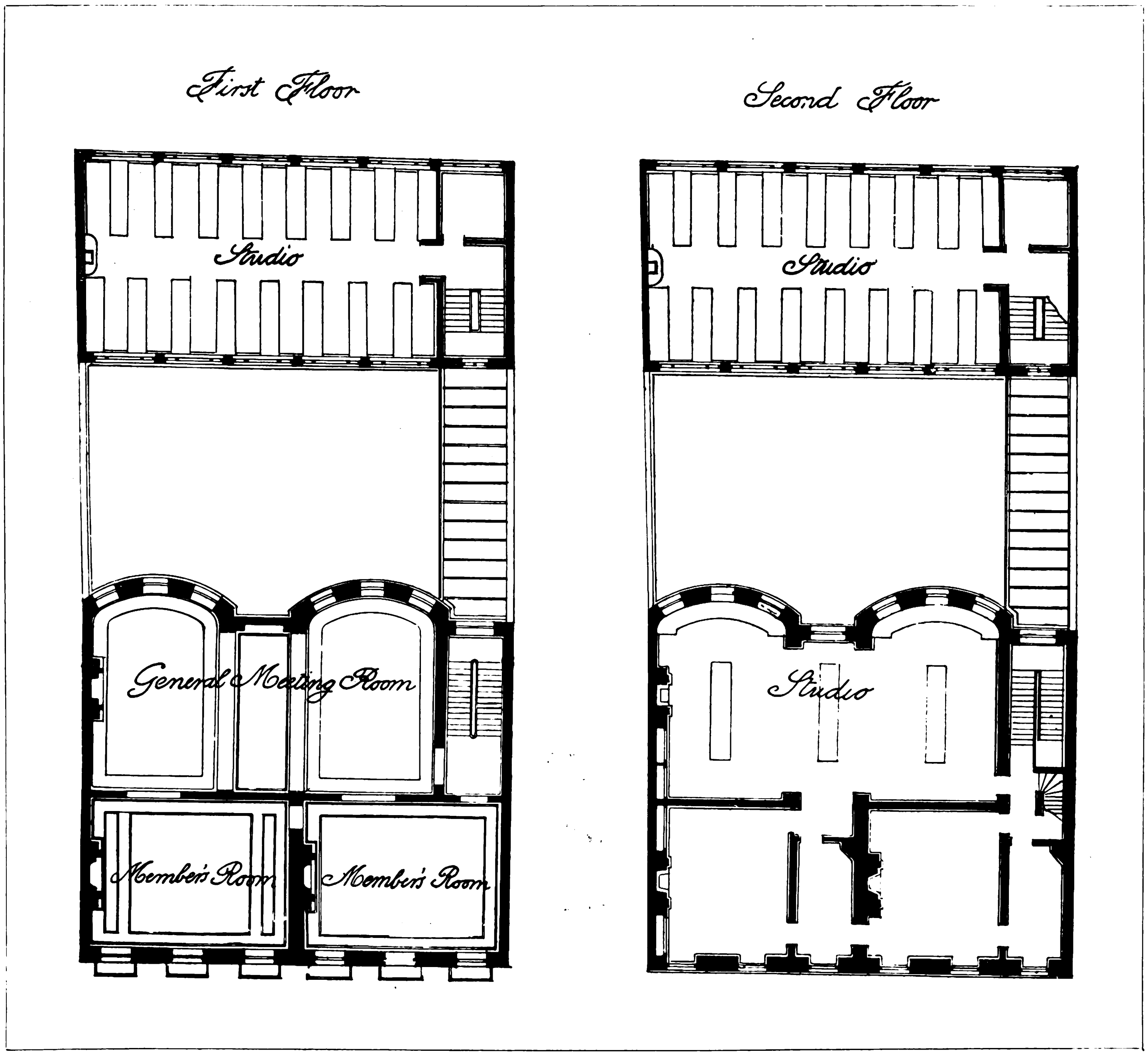
Powdering-cupboards, so indispensable in Soho Square, are not provided; for the rest, the rooms are delightful, well lit, lofty, have beautiful marble fireplaces, and what decoration there is is of the most refined description. The doorways, a feature of this square, are all alike (except the centre blocks, which have meaner doorways than the rest); three openings under a rusticated arch; in most cases the lunettes have been afterwards pierced with fine lead radiating fanlights.

These fanlights, repeated as an inner screen, give at a minimum of cost a most effective entrance hall.

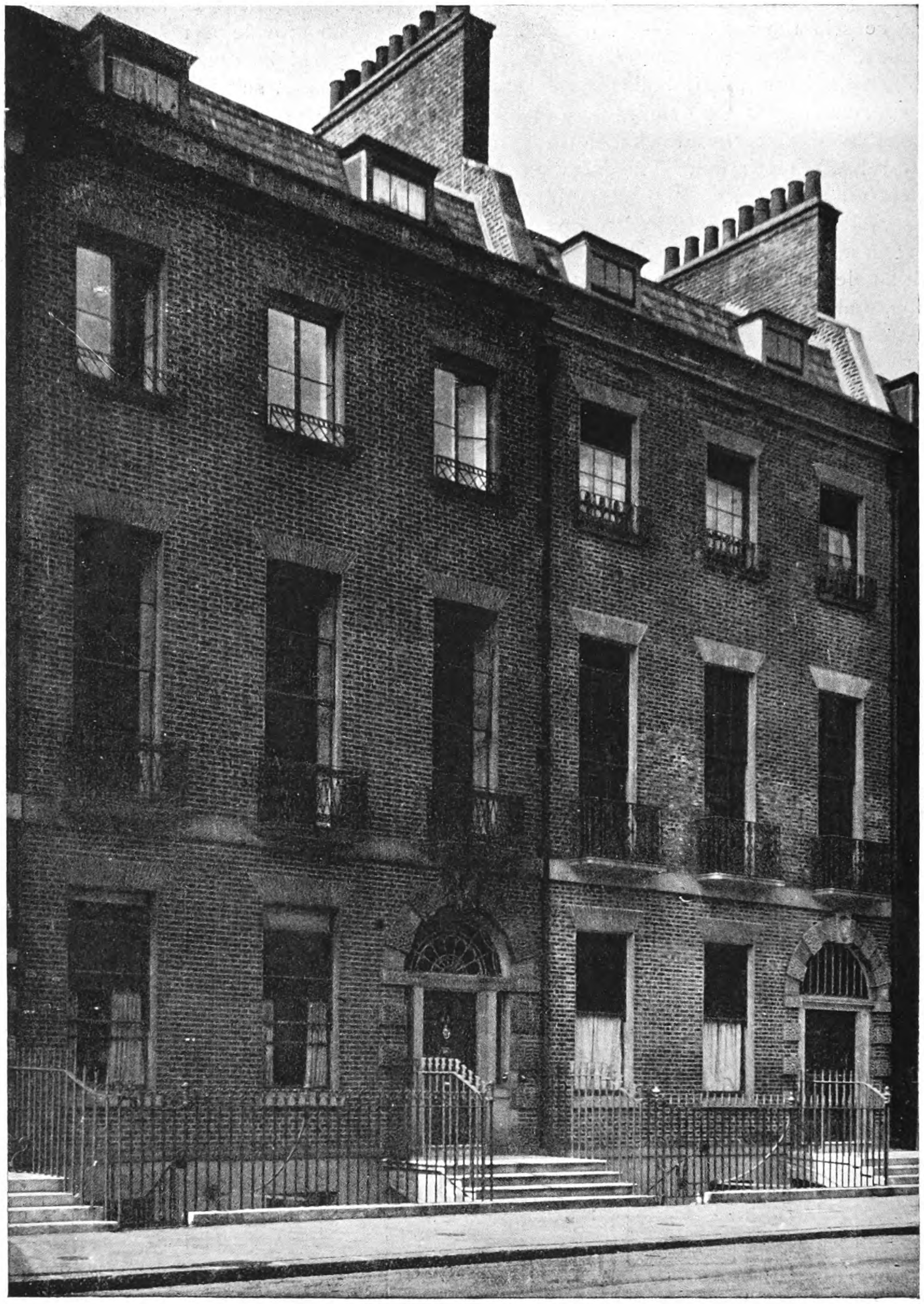
The ground-floor rooms are large and very simple, the front room having a pair of Ionic columns in imitation marble and the hall a fine cornice. A stone staircase, with an iron handrail, leads to the drawing-room floor: magnificent apartments with long windows and light iron balconies; in one, a geometrical ceiling of Adam character and a fine inlaid mantelpiece of marble; the other has an even finer fireplace, but not such a fine ceiling.

To fit the premises for the occupation of the Association, only such alterations as are vitally necessary will be undertaken. To provide a meeting-room and library, one of the staircases will be removed with its side walls all the way up. Members, never suitably catered for at Tufton Street, will have the two large first-floor rooms overlooking the gardens of the square, a luncheon-room and the library.

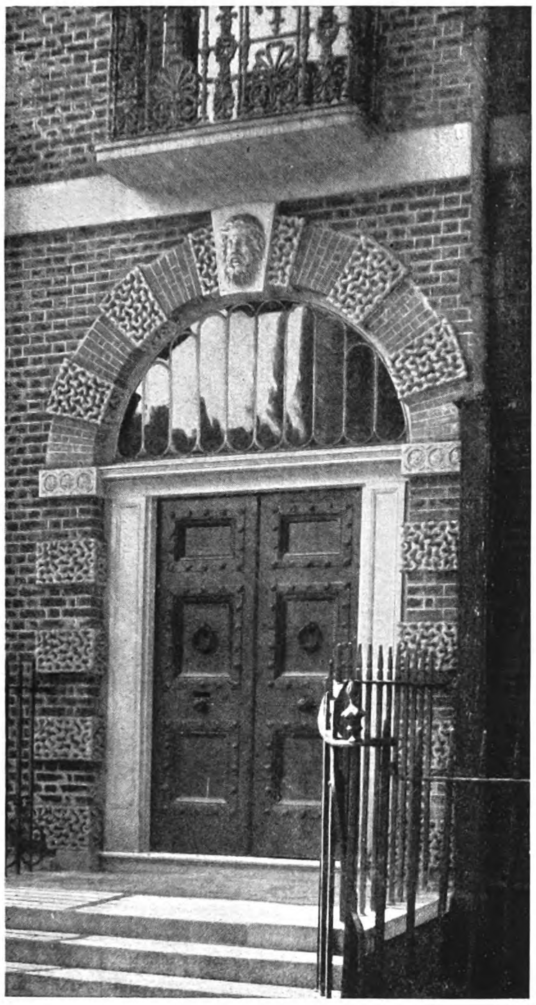
As for the schools, the old back stable buildings abutting on Morwell Street will be demolished, and a four-story studio building erected in their place, with access from Morwell Street, and connected to the main block by galleries for the exhibition of selected casts from the Tufton Street Museum. One hundred and twenty day students will be provided for, with an art classroom and a life-room in addition. For their recreation, so essential in winter, the students will have a large room, where fives or gymnastics can be indulged in *ad lib.*



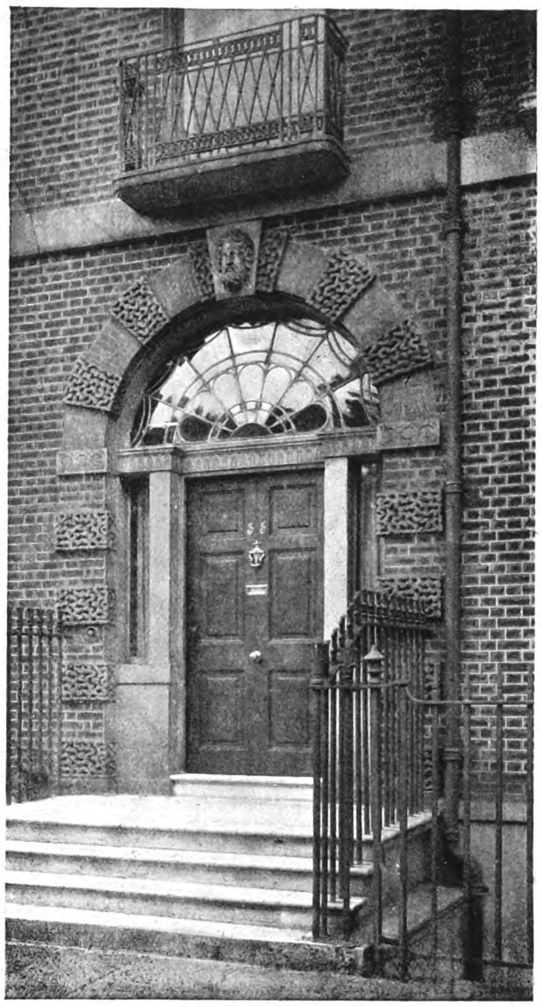
PLANS OF NOS. 34 & 35 BEDFORD SQUARE, LONDON, SHOWING PROPOSED ALTERATIONS



NOS. 34 & 35 BEDFORD SQUARE, LONDON.



ENTRANCE TO 34 BEDFORD SQUARE.



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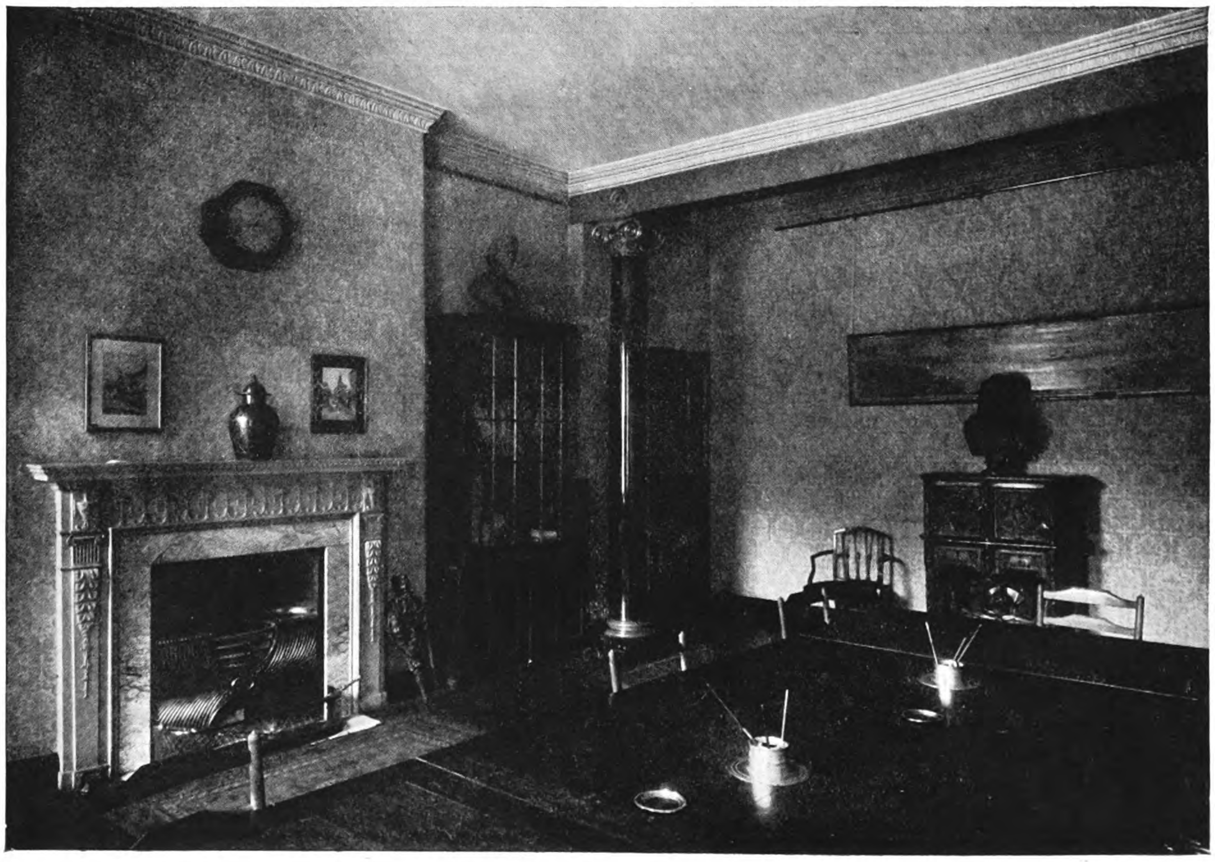
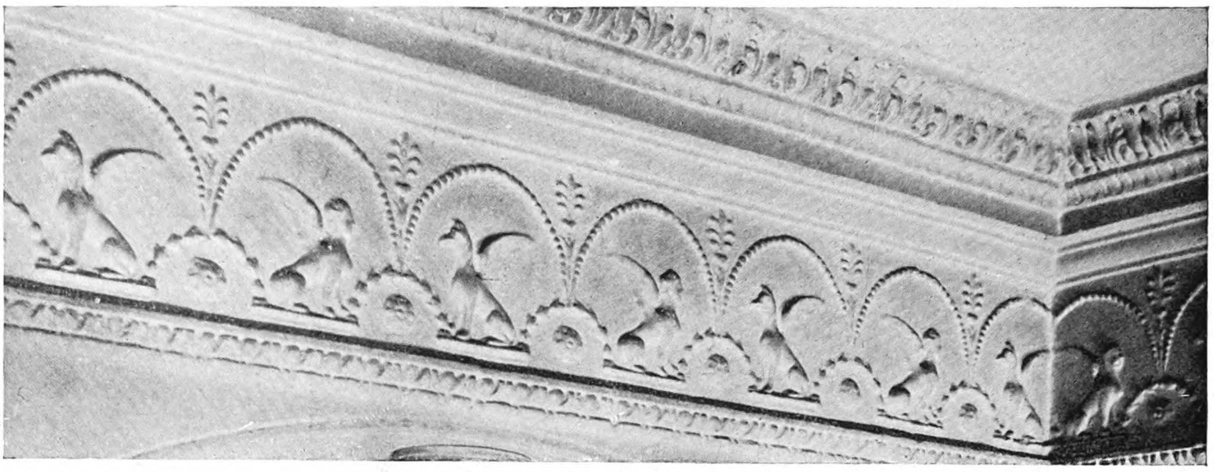
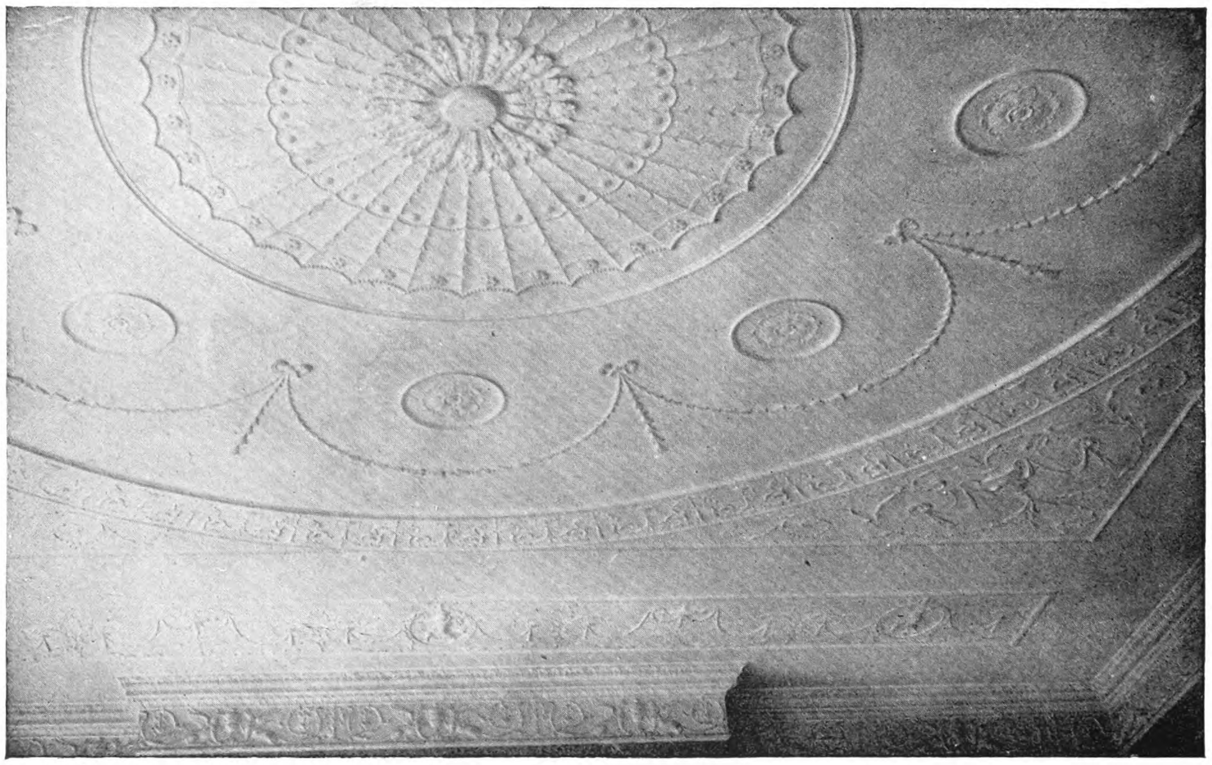


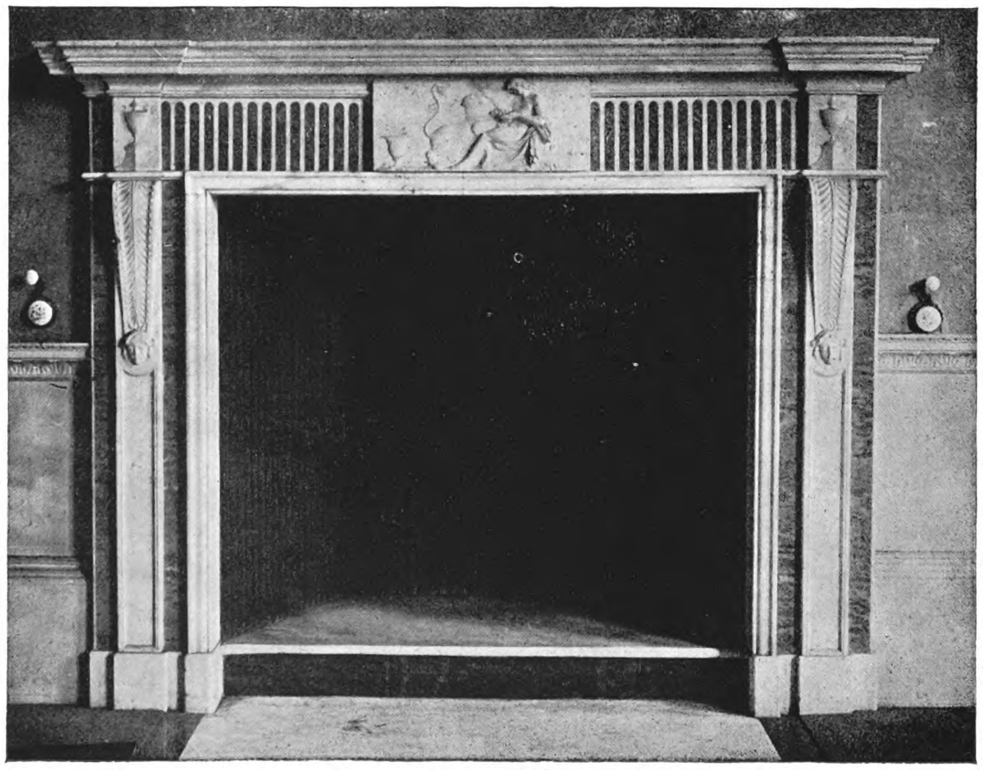
COUNCIL ROOM.



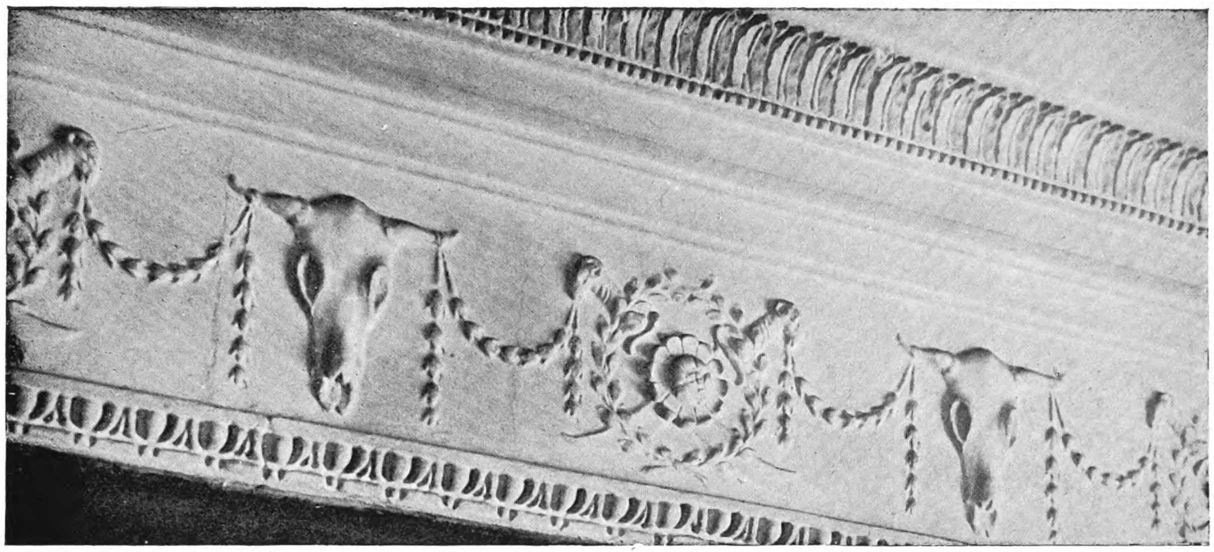
FRIEZE AT 35 BEDFORD SQUARE.



DETAIL OF CEILING IN FIRST-FLOOR ROOM, NO. 35 BEDFORD SQUARE.



FIREPLACE, FIRST FLOOR, NO. 35 BEDFORD SQUARE.



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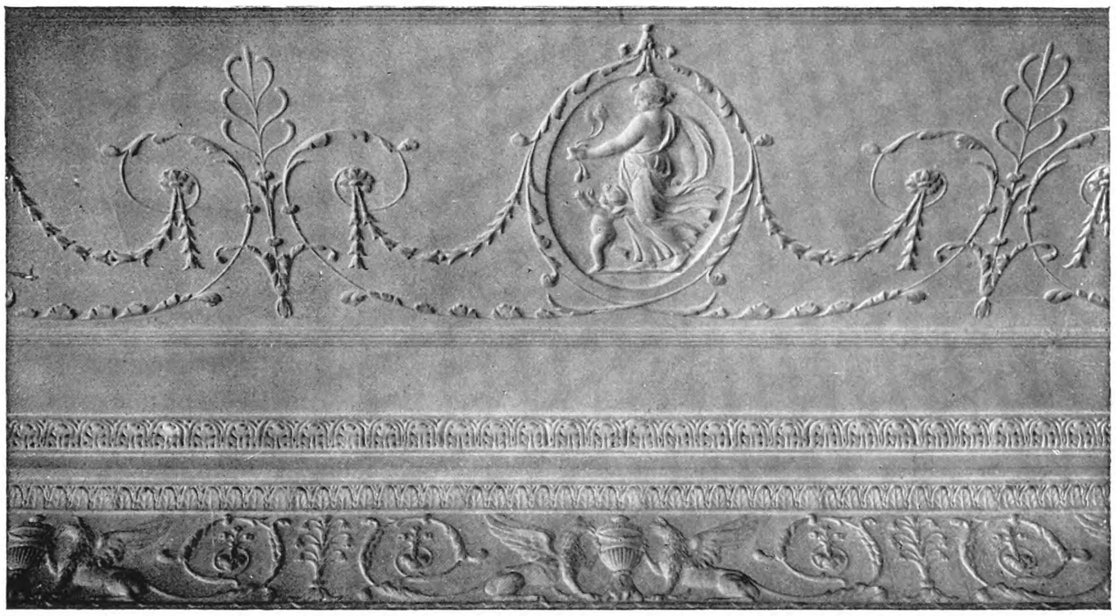

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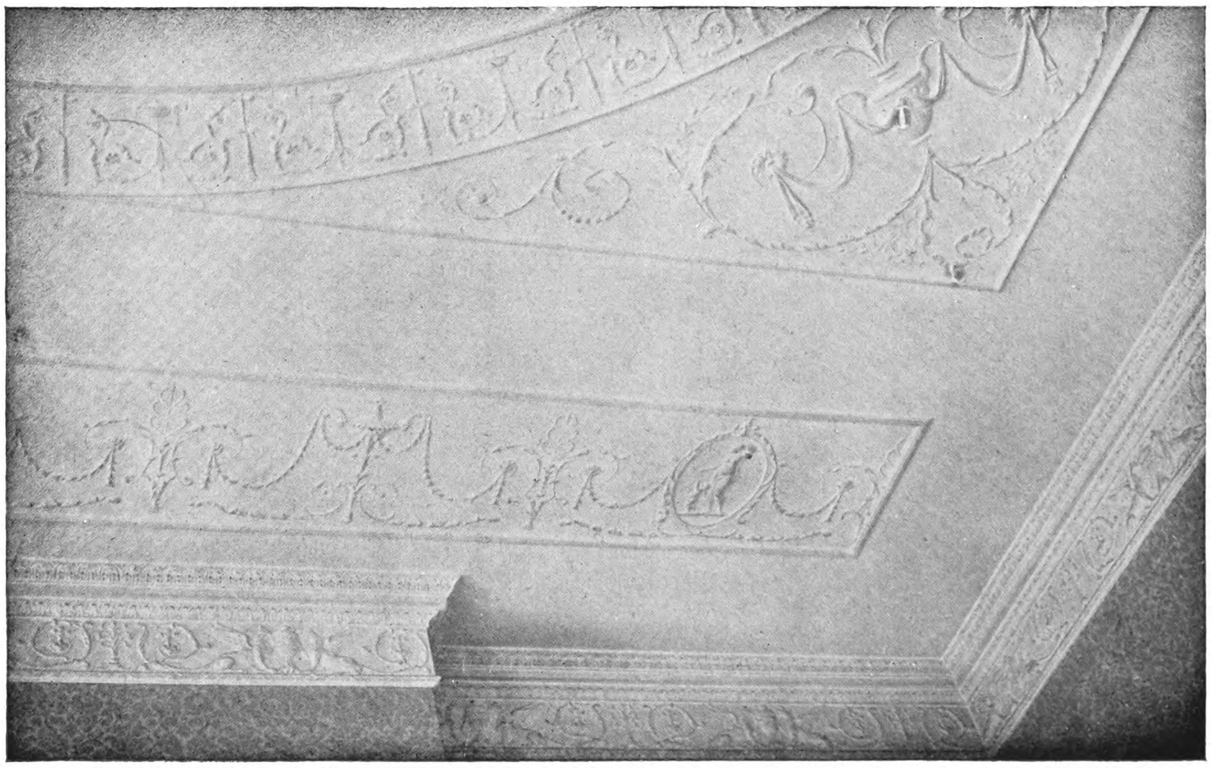


DETAIL OF CEILING AT 35 BEDFORD SQUARE.

"THE WORKING-CLASS HOUSING PROBLEM AND ITS SOLUTION."

We have received the following letters in response to our request for correspondence on the above subject:—

To the Editor of The Architectural Review.

Sir,

I read with interest the article in the October Architectural Review under the above heading, but I cannot think that the problem will be solved by lightly refusing to discuss points essential to the solution of the problem, viz., the "selection, purchase, and lay-out of the site." Surely one of the chief causes of unhealthy and disreputable dwellings is the disgraceful way they have been thrown without thought or reason on to the site by "land and house agents, surveyors," and engineers. A site can be overcrowded (to the detriment of the health of the inhabitants of the houses) in the same way that a house can be overcrowded by its inhabitants.

If the architect thinks he can continue to work as heretofore, by designing pretty little single cottages on paper, it is time he were disillusioned. He will have to gird up his loins and turn to and attack the problem in its "dug-out." The first step will be the selection of a healthy and convenient site, properly laid out, viz., planned for convenience of traffic and housing; the house should be a fitly designed detail of the scheme as an entity. A fitly designed cottage nowadays should be as suitably designed for its purpose as a piece of machinery should be—I say should be, as the engineer is not such a practical designer as many people believe, as witness many a motor-car or motor-cycle in which a great number of the details seem to be designed on paper by a man who makes no practical use of them.

Again, why should a tenant pay rent for an empty space in a roof? Has Mr. Macartney ever seen a wall with one coat of plaster? I should prefer to pay rent for a house with two coats in which money has not been wasted in the empty space of a steep roof (of course, if money is no object a picturesque steep roof may be added). If casements are required with a light over the transome there are a good number of fittings on the market which, quite unobtrusive and cheap, work with a cord, and do not require steps for the housewife's use. I may say I have been engaged for some years on town-planning and housing schemes, and am at present occupied with that work.

Yours faithfully,

J. A. Hallam, Architect.

Member of Town-Planning Institute.

32 Park Place, Cardiff.

To the Editor of The Architectural Review.

Sir,

I hasten to reply to the excellent suggestions made by Mr. M. E. Macartney, Lieutenant E. Holloway, and Mr. J. J. Joass, for a solution of this difficult problem, and I think the standard cottage is the germ of better things.

Of course it requires more frontage than the ordinary type, but that must be insisted upon at all costs. What can be worse than the abominable house which is the outcome of a narrow frontage, and which may be seen by the thousand in the Midland, Lancashire, and Yorkshire manufacturing and mining districts?

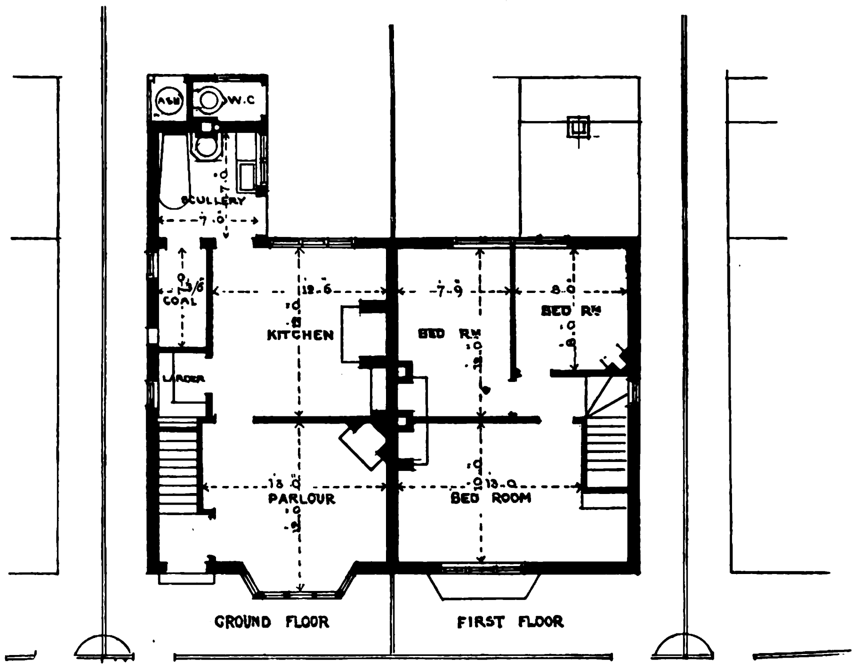
To obtain three bedrooms on the first floor with this class of house, one of them is placed over a projecting scullery with sometimes three outside walls. The bedroom has to be reached on the first floor by an unsatisfactory passage; but, worst of all, owing to the narrow frontage, the projecting scullery block at the back overlaps the kitchen, where the family live. The kitchen window is in consequence crowded to the side, and leaves the room dark, gloomy, and sunless, especially as the next house scullery block projection is within a few feet. Such houses should be condemned for all time.

I know the standard cottage plan very well, my firm having built similar houses, with an elevation not unlike that illustrated. But the average working man, in the districts I have named, insists upon having a parlour, and I think he is right. It may be said that he does not use it, but he does use it on Sundays and on festive occasions, and he is now using it more, and it frequently contains a musical instrument of some kind. To meet this requirement I enclose a plan. The bedrooms, you will notice, are exactly the same as illustrated by you, whilst the main dimensions of the outside walls are the same on the ground floor.

Parlour.—This is obtained by placing a wall under the cross wall of the bedroom above, and I have added a bay window (which the tenant always likes), and this gives a parlour sufficiently large for a working man's requirements.

Kitchen.—The kitchen is a fair size, is thoroughly lighted, and, above all, has a comfortable hearth, the doors being well placed to prevent draught.

Scullery.—A small scullery becomes, of course, a necessity, with the provision for a sink, copper, and bath. The hot water for the bath would be supplied from the copper, thus saving plumbing complications, in the way of circulating pipes and their consequent repairs; this arrangement is found to work well. The bath top, which consists of two light pieces of ledged framing, I suggest might be used as a table when the bath is not required, but when in use it would form a good dry platform for standing upon the wet floor.



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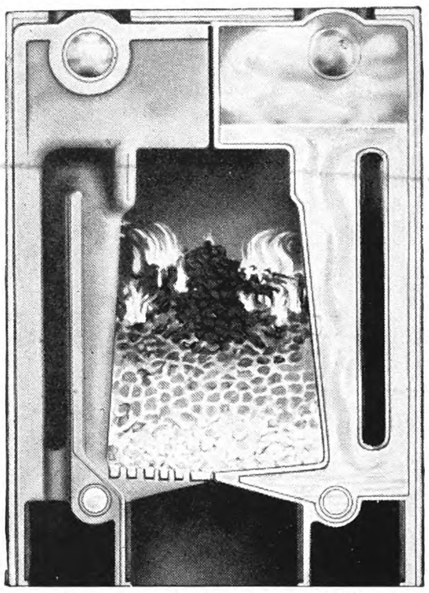

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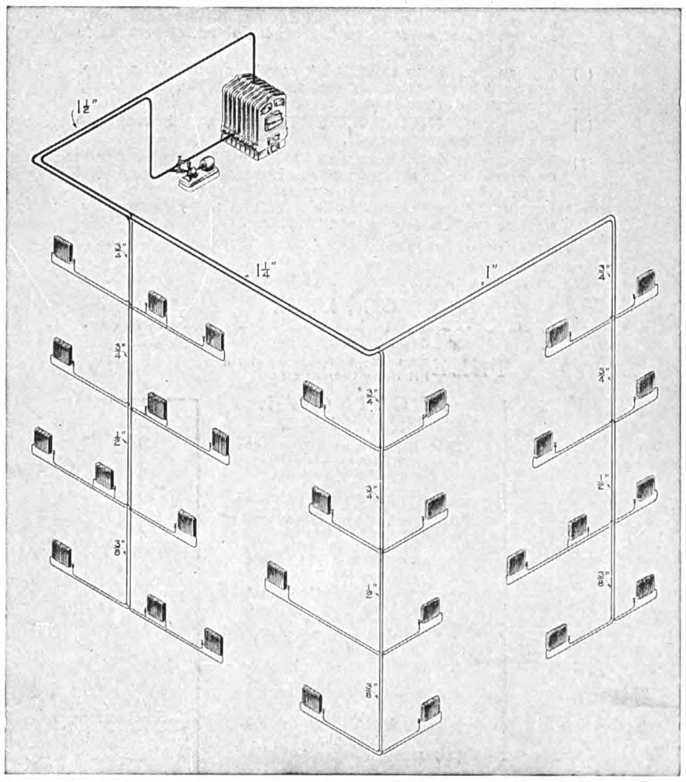

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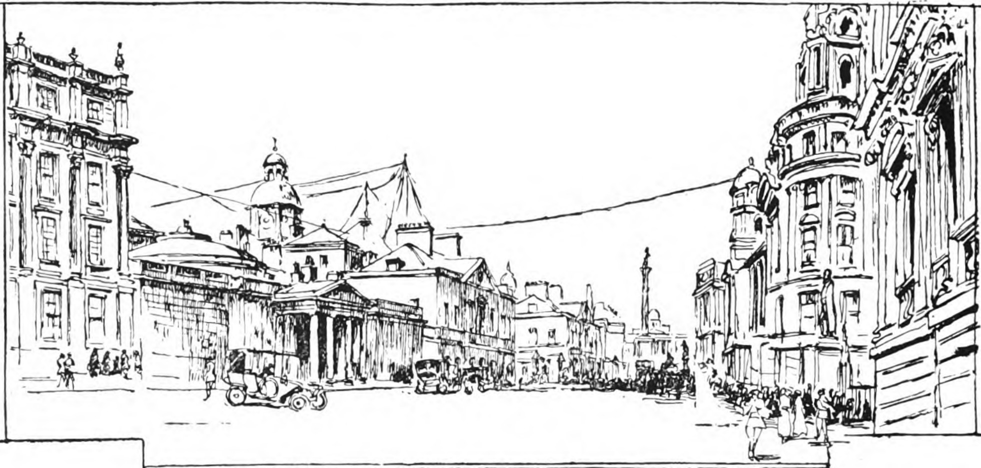

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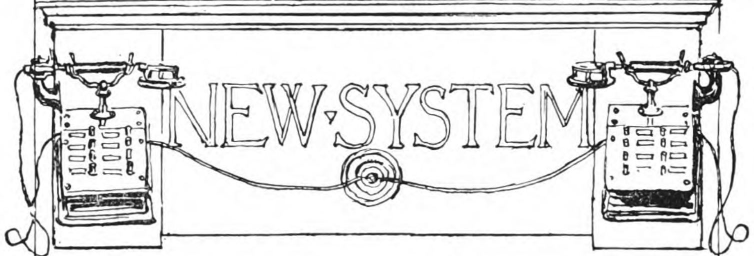

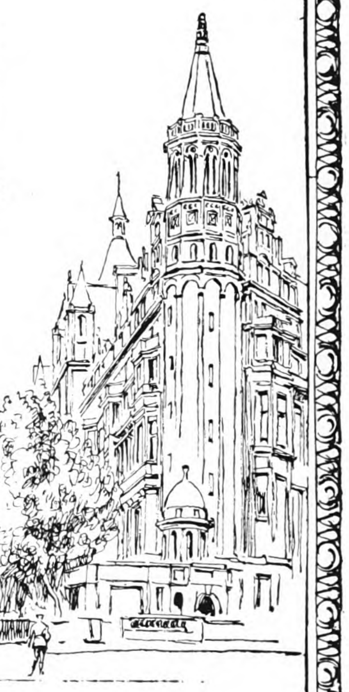

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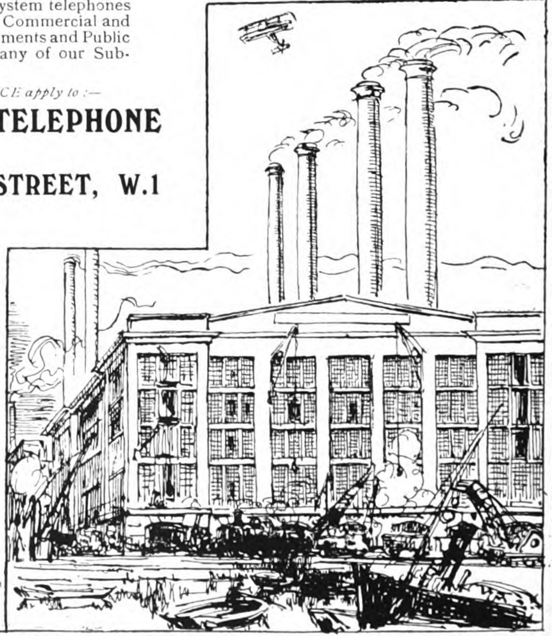


Semi-detached Houses.—Although these are not so architecturally pleasing as a group of four, I am convinced that semi-detached houses have advantages in other respects, which more than compensate for any architectural loss. A first-class reliable builder, whom I have frequently consulted on this subject, always builds his houses semi-detached for investment. He contends that there is little loss of frontage, as the back passage to other houses is dispensed with, and a saving of fencing and gates is obtained. His tenants strongly object to a joint access to the back premises, and are willing to pay a little more rent for privacy. A man's house is his castle, and a semi-detached arrangement secures him the privacy he desires, as his front gate is secured for himself alone, and serves for his private back access also.

It seems unnecessary to point out the other advantages of a semi-detached arrangement, such as a better circulation of air round the houses and the satisfactory lighting of the staircase and larder. When in America, I noticed that semi-detached houses were becoming increasingly popular amongst the working classes.

Yours, etc.,
ALBERT N. BROMLEY, F.R.I.B.A.
Prudential Buildings, Nottingham.

To the Editor of THE ARCHITECTURAL REVIEW.

SIR,

Mr. Macartney's article on the working-class house problem, together with Mr. Joass's suggestive elevations, is a really valuable contribution to the subject; but whether it will be productive of any improvement in the ways of local sanitary authorities is, I fear, open to question. It will always be difficult to convince the minds of average councillors that the grouping of cottages in the way shown by Mr. Macartney's plans is a distinct advantage over the long, straight, unlovely rows so beloved of the speculative builder.

One of the most important points in connexion with the Building By-laws, which in their present form do so much to strangle sensible building, is that of the height of rooms. And in this connexion it seems to me that there is some misconception with regard to the powers of local sanitary authorities. The Local Government Board Model By-laws contain no reference to the height of rooms, and in the annotated by-laws a note will be found to the effect that the Public Health Act, 1875, does not empower local authorities to make by-laws regulating the height of rooms.

I have just examined thirty-nine sets of local by-laws, and I find that in seventeen only is there a by-law dealing with the height of rooms. Seven of these fix 9 ft. as the minimum height, eight fix 8 ft. 6 in., and the remainder 8 ft.

There can be no doubt that, as pointed out by Mr. Macartney, Mr. Voysey, Mr. Baillie Scott, and other architects of experience in this class of building, within certain limits of convenience a room of low altitude is more easily warmed and ventilated than one of greater height. Personally I should be content with 7 ft. 6 in., but should regard 8 ft. as a maximum height for the kind of rooms we are considering. The obvious advantages gained by adopting a lower standard of height are, increase of floor area, a decrease in the height of the staircase, and better ventilation.

Height is wanted for head-room, and excessive height in proportion to floor space is not only useless but mischievous. What is wanted is adequate provision for the circulation of air, and sufficient but not excessive window space.

The question of the use of materials other than ordinary building bricks for walls is rather more difficult to deal with. Mr. Macartney refers to "patent bricks," by which I understand he means thin hollow bricks ranging from two to four inches in thickness, of which there are several varieties on the market.

The question arises, will a 2 in. hollow brick rendered on the outside and plastered inside form as good a protection against variations of temperature as an 11 in. hollow wall built of ordinary bricks and having a cavity of 2 in.?

I certainly cannot think that a solid ferro-concrete wall 3 in. thick can be a satisfactory material for an outside wall.

It ought not to be difficult to solve a question like this if only we had some properly equipped body to make experimental researches into this and many other questions.

One other point I will refer to: the position of the sanitaryoffice. In the case of the Evesham cottages, which Mr. Macartney takes as a type, the offices are of the earth-closet variety, and are evidently intended to be placed at some distance from the cottages. In some districts I have found a regulation in force requiring a minimum distance of 10 ft. between the back wall of a house and the earth closet. I can find no authority for this restriction either in the Public Health Act or in the Model By-laws, and I can see no reason for its enforcement. A properly constructed earth closet, with proper means of removing the receptacle from outside, can and should be a part of the house, and, if not approached from inside the house, ought to be accessible under cover.

The most serious defect in "back to back" houses which are so common in many Northern towns is the position of the w.c.'s. As these houses are usually planned, the provision of a w.c. inside each tenement is impossible, and so the necessary offices are grouped in a back yard. The publicity and inconvenience of access inherent to this arrangement prevent the proper use of these offices, especially in the case of children, and the result is seriously insanitary conditions inside the tenement.

I am glad to see Mr. Macartney's advocacy of the double-hung sash window; and fully endorse all that he says on that subject.

Yours, etc.,
KEITH D. YOUNG, F.R.I.B.A.
17 Southampton Street, Bloomsbury.

To the Editor of THE ARCHITECTURAL REVIEW.

SIR,

In response to your invitation for correspondence, I venture to make the following remarks in the light of a varied experience in Canada.

I will base what I have to say on the excellent little plans of Lieutenant Holloway. These are carefully and economically worked out, and give the desired accommodation. Following the order of treatment in the article referred to, namely—1, Design; 2, Planning; 3, Construction—I make some suggestions which I think worth consideration. As to design, I note that all the designs illustrated are very charming, and almost all depart from the detail of the window that is recommended, for they show casements and not sashes. My sympathies are with the casement for very small cottages, but my judgment is for the sliding sashes as affording the best practical ventilation and most convenient handling. The window should, I think, extend quite to the ceiling, however, not merely to within 9 in. of it.

In regard to planning, my suggestion is that the scullery should be called a kitchen and laid out for use as kitchen. Where the bath is shown on the plan there should be a range of what may be called the portable type, not built into a recess in brickwork. I find that housewives appreciate the freedom of access to this type of range. Where gas is cheap economy is increased. The copper should be replaced by a vertical galvanized iron hot-water cylinder, from which hot water may be circulated to a tap upstairs as described later. The manner of handling the range and the hot water will be found to save space.

The bath in the scullery strikes me as likely to be a vexatious obstruction to the housewife, and it occupies valuable space. In any case, why is it so large? Its use with any degree of privacy must be a still greater vexation and interference with house-work. It would probably be diverted to makeshift uses for which it is not intended, and become more or less of a nuisance. A portable shallow tub, large enough for one to stand up in, and suited and employed for one or two definite purposes, would be many times more real use.

The living-room fireplace, though not an absolute necessity —a stove would warm the house more efficiently—is a matter of so much comfort and pleasure that it should be retained, but it should be treated with the greatest simplicity—built of plain bricks of good colour and quality, and should have a plain plank for mantelshelf.

The kitchen sink should be placed adjoining the range, so that the filling of pots and placing them on the range may not involve walking to and fro even across the whole of the little kitchen. In the partition between kitchen and living-room there should be a dresser forming part of the partition and accessible from both rooms, the drawers for cutlery capable of being pulled out from either room, the "top" becoming a service counter. This greatly facilitates all operations of setting and clearing away articles of table service. When the dresser-doors are closed on either side, the two rooms are separated. With these conveniences the scullery would be found to be a more than ample kitchen. A wooden veranda along the back of the house with a wooden coal-bin would give a good working space for many operations of cleaning better done outside the house, and the coals would not have the same certainty of messing up the kitchen. Upstairs, the fireplaces should all be omitted: this would save a considerable amount of brickwork and grates. The chief value of these fireplaces is as ventilators. Cheaper and better methods of ventilation ought to be devised, either by means of more efficient windows or by 4 in. pipes carried up beside the chimneys. There should be one flue from the upper floor with a ring for the fixing of a stove-pipe when required. One stove in one of the bedrooms is all that is ever likely to be used at any one time. This should be of portable type, preferably set in the largest bedroom, but capable of being erected in any one of the others. In many cases even this would not be required, but if the flue is provided a stove could be "rented" for any special case such as sickness. In Canada, it is a frequent practice to place a stove of this kind in the room farthest from the chimney and to carry the flue-pipes by ring openings in the partitions through several rooms, following an indirect route into the chimney, thus helping to warm the various rooms in the process. This proceeding will probably not commend itself to Englishmen, as the pipes are unsightly in appearance. It has considerable practical value, however, and in summer time the pipes are taken down and the holes stoppered.

In the bedrooms, the space saved by the omission of fireplaces should be utilized as cupboards, which need only be of the lightest construction. Shelf and hanging room is an absolute necessity in a bedroom, and should never be omitted.

At the head of the stair I would advocate a space with taps for hot and cold water, with a drain to take away water from portable wash-hand basins and bath-tub. A small recess at the expense of the largest bedroom might be made to accommodate all this, including the bath-tub, which could hang on the wall. This demand may appear to some to be extravagant, but the actual extravagance is in having an unusual bath in an awkward place, not in having real conveniences which would encourage and not deter from habitual cleanliness. In these days we should be ashamed to say that a cottage is fit for human habitation that does not contain the vital necessities that plumbing supplies. We are much too conservative in the matter of sanitation in this respect. Pipes should be placed inside the house where they will be secure against frost. In Canada, this must necessarily be the case, and not only can be done, but is accomplished perfectly by the modern improvements of plumbing materials and methods. This cottage should have a water-closet where the coal space is shown. That it is beside the kitchen is no drawback. The excessive isolation so commonly insisted on for water-closets is a remnant of the ideas of a time when closet apparatus had not reached the present state of perfection.

Coming to the question of construction, I have had experience of the comfort of houses built of wood. These are constantly employed in countries where weather conditions are most extreme, and they are much warmer than brick ones. Prejudices against wood construction must be modified. The main point is the danger of the spread of fire. When a fire actually occurs, the loss is heavier on a brick house than on a wooden one, for both are about equally liable to become complete losses. After being gutted by fire, the brickwork of the one can only be demolished. Shingled roofs are too dangerous in this respect, and I know of nothing preferable to slate or tile, unless asbestos slates can be manufactured to compare with them in first cost. These have the advantage of lightening the carrying construction. Houses so separated as to avoid risk of fire spreading from one to the other are, of course, more expensive, both through their occupying more ground and from their having no walls in common. On the other hand, to accept as a settled verdict that there is not room enough upon this earth to afford to every man a separate free-standing cottage is a confession of the failure of our economic constitution that one ought to refuse to consider final.

In conclusion, I should call in question the wisdom of building cottages of so small a size to last "at least one hundred years." One should rather aim at a maximum of fifty years or less. Conditions are going to change a good deal in that time. We have too many of the derelicts of past centuries on our hands. Posterity is not going to bless us for multiplying the number for them to deal with by ten thousand fold. Not that I do not share the love and admiration of the old and lovely, but the question we are handling is the crying need to make more wholesome and happy the lives of living men. Things are not more beautiful and right simply in proportion to the time they will last: "a lily of a day is fairer far in May" than the most venerable rotten tree. In the solution of the housing question this point of obtaining a short-lived and yet satisfactory habitation is one that must be kept directly in view if we are to get any farther forward.

CECIL S. BURGESS, A.R.I.B.A.

Bramshott Camp, Hants.

[Further correspondence is held over till next month.]

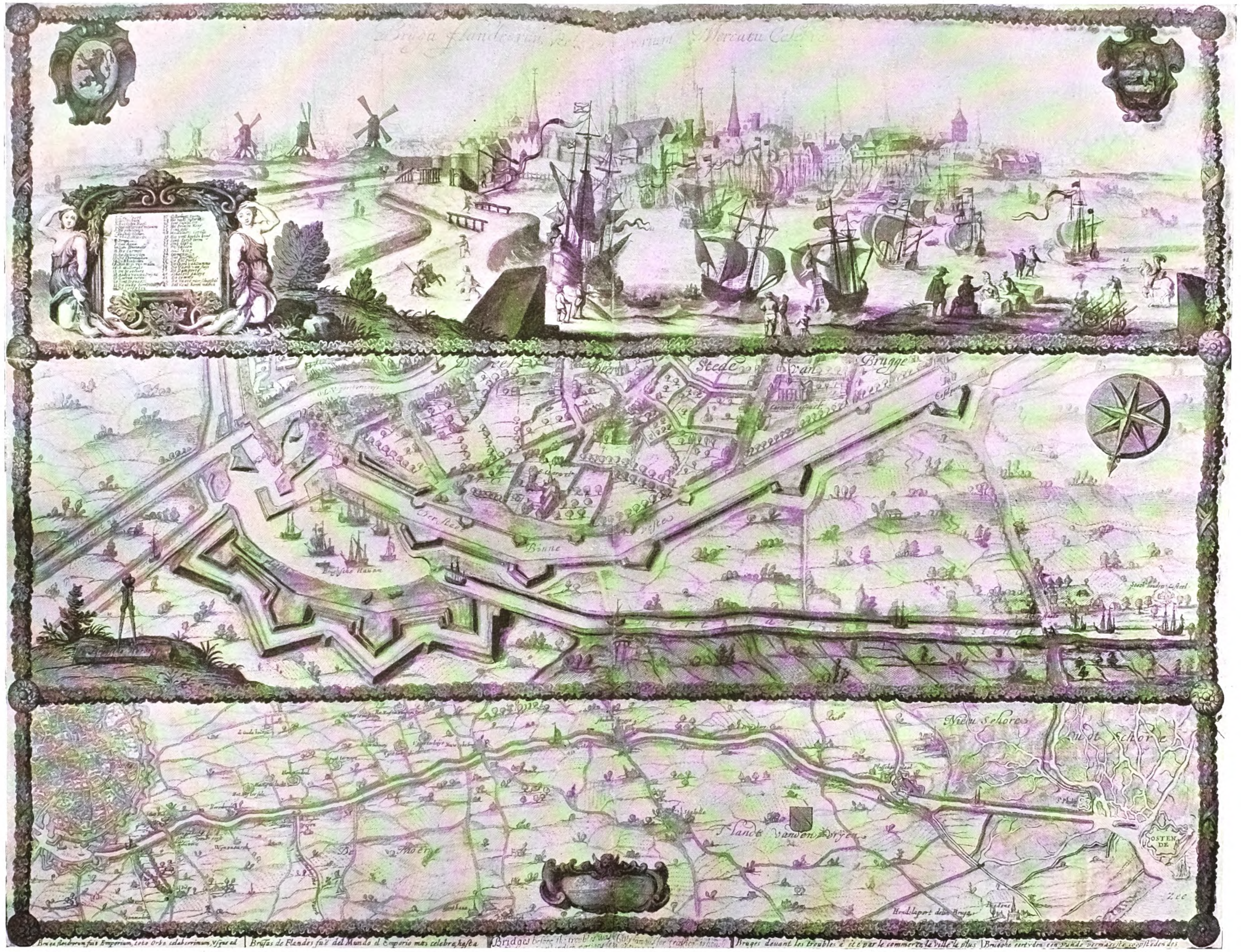


Plate I. December 1917.

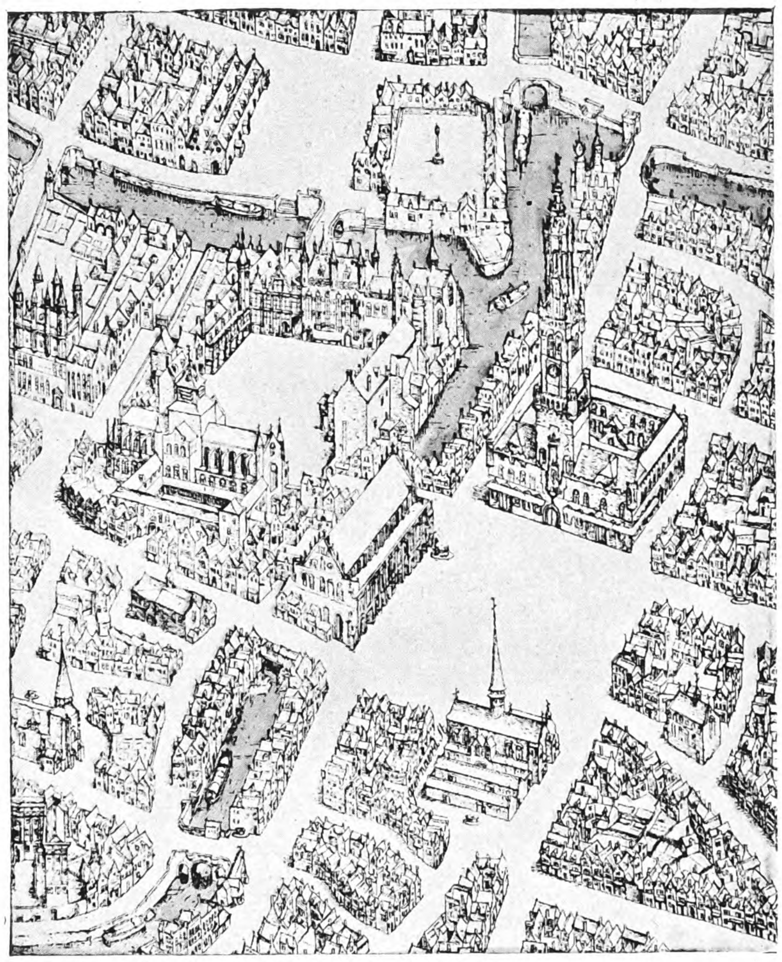
VIEWS OF BRUGES, AND MAP SHOWING THE OSTEND CANAL.

From an original Water-colour Drawing, circa 1664, now in the British Museum.

THE ARCHITECTURE OF BRUGES.—I.

By ARTHUR STRATTON, F.S.A., F.R.I.B.A.

ON 15 October 1914 the enemy entered Bruges, and from that day to this the menace to the city has been most disquieting. At the moment, the advancing armies are in sight of the world-famed Belfry, beckoning to them across the plain, and it is futile to ignore the fact that the fate of the wonderful watergirt city hangs in the balance. The desolation in Belgium has been infinitely greater than anything that could have been imagined in the days before this flood of destruction burst upon the world: cities, towns, and hamlets have been pillaged and levelled to the ground irrespective of the architectural and historical value of their buildings and the treasures they contained. Although communiqués tell of damage to the railway station and of fires in the neighbourhood of the docks, there is no reason to suppose that irreparable havoc has so far been wrought in the heart of one of the most precious mediæval cities of Europe. It is not unlikely, however, that interest may again centre any day upon Bruges, as there is something more than a possibility of its being involved in some of the fiercest fighting of the War.



THE GRAND' PLACE AND PLACE DU BOURG IN 1562, AFTER MARC GHEERAERTS.

Bruges is unique. To speak of it as the "Venice of the North," as many writers have persisted in doing, betrays a lack of understanding of its predominant characteristics and tends to detract from its individual appeal. Bruges is no more like Venice than Chester is like Salisbury. Each owes its characteristics to the conditions underlying its growth; the waterways may be similar without their quay sides or shelving banks presenting any marked resemblance. Most British travellers have seen Bruges at one time or another and felt the glamour within its walls, but to understand its peculiar attractions it is necessary not only to be familiar with the appearance of the city in modern times, but to know something of its beauty at the height of its fame, and of the causes which led to its uprising and subsequent varied fortunes.

To conjure up visions of the beautiful is the poet's quest; to visualize stately buildings and noble monuments, to show the aspect of cities which once upon a time were aglow with all the art and beauty that man could devise, is one of the most fascinating recreations of the studiously minded architect. In the march of progress impelled by civilization, many towns and cities, once centres of activity, throbbing with the life of countless thousands engaged in commerce and in manufacture, in the arts of peace, and, above all, in the art of living, have been left behind, stranded as the streams of prosperity have rolled to other shores. Such towns are Bruges and ruined Ypres,* once proud with their lofty towers proclaiming their power and independence for miles around, but in these latter days chastened, shorn of the greater part of their display, and mere shadows of their former splendour.

Bruges in the Middle Ages was one of the most powerful communal cities of Flanders, exercising an immense influence over the fortunes of Western Europe at a time when cities now pre-eminent were little more than hamlets. Living amidst the plains and dunes of Western Flanders, the Flemings of those days were a hardy people, industrious and enterprising wherever commercial success was likely to crown their efforts. Conscientious in their work and religious by temperament, they brooked no interference with their rights and knew no bounds to their ambition. But to such an extent were they jealous of their rights as citizens of a free city that half the history of Bruges and the neighbouring cities of Ghent and Ypres in the Middle Ages is concerned with the struggles of the one to safeguard its interests against the inroads of the others. Rarely on speaking terms with one another, these three *bonnes villes* fostered feelings of local patriotism to such an extent that in order to maintain their own freedom and to protect their commercial interests they often allowed their bitter feelings to govern their better judgment so far as to make them hate one another more than their outside foes. But loyalty to his own city was ever a ruling trait in the character of the Fleming, and differences were forgotten when the menace of a common enemy really threatened his liberty, as when the patriot Philippe Van Artevelde of Ghent led the men of Ghent and Bruges in combined force against the Counts of Flanders. This was in 1382, and Froissart records how Van Artevelde kept the state of a prince during his residence at Bruges, as well he might, for he had possessed himself of all that was to be found in the sumptuous ducal palace.

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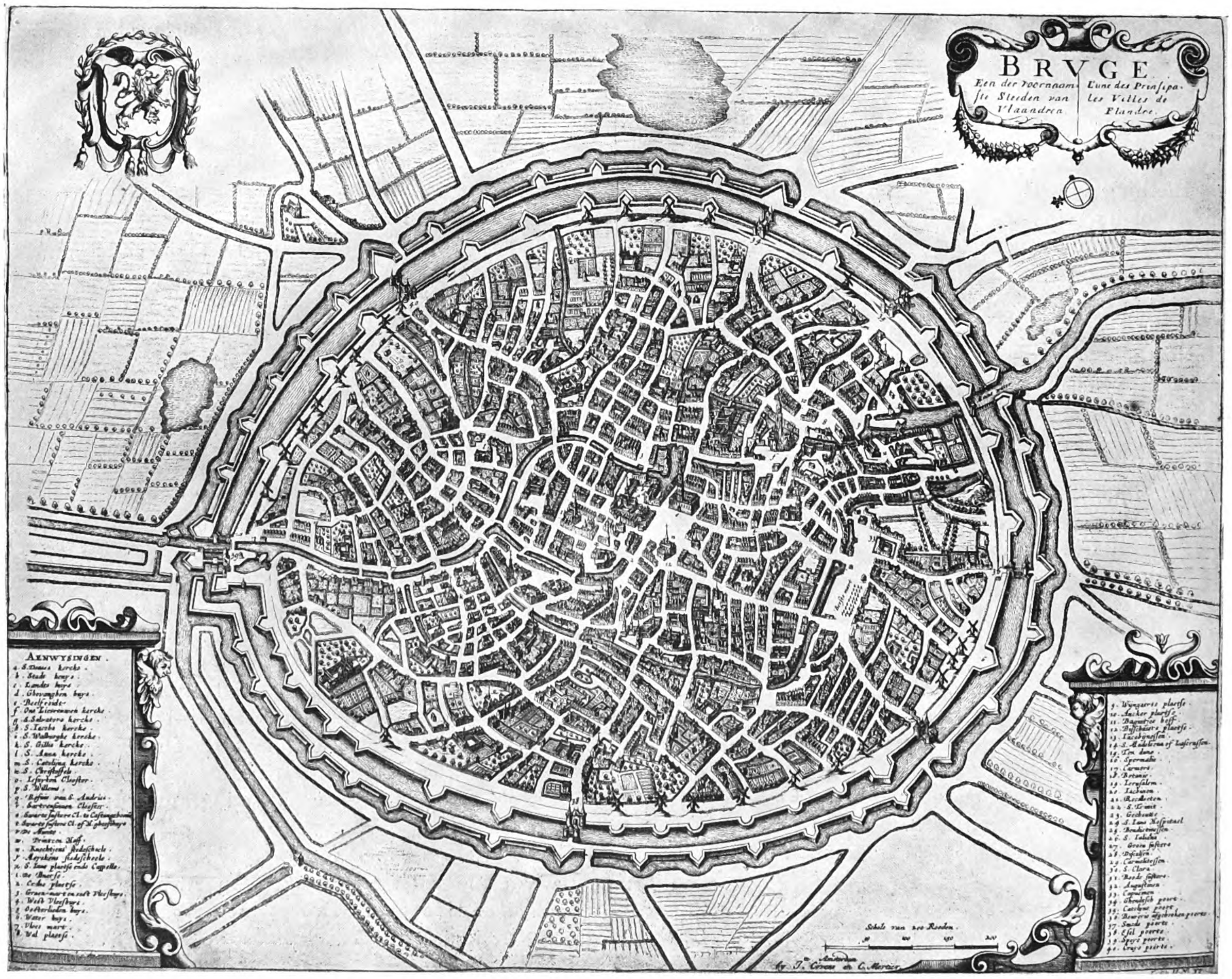
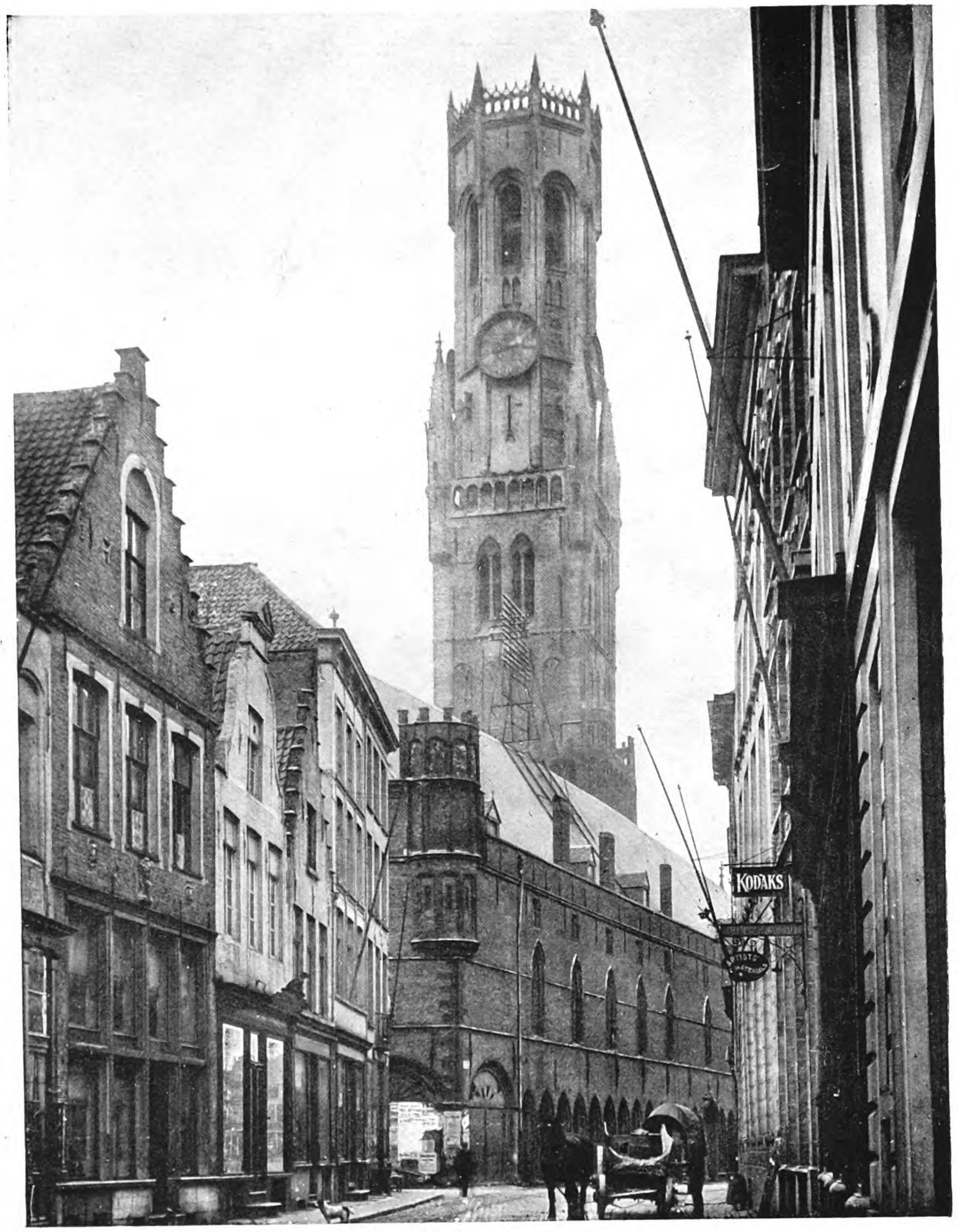
* See THE ARCHITECTURAL REVIEW, January 1915.

The early history of Bruges is stormy and turbulent: it bristles with siege and strife, with battle and intrigue, with victories won and losses sustained; but through it all there stands out clear and bright the Fleming's love of freedom, to attain which he was willing—even as to-day—to sacrifice everything but his honour. His genius for commerce, his appreciation of beautiful things, and his determination to excel in whatever he put his hand to, were amongst his governing traits; and these traits, no less than the geographical position of his country and the natural formation of his terrain, have all left their mark on the building arts which the Fleming evolved. It could not be otherwise, but a just estimate of the architecture of Bruges cannot be arrived at without an understanding of the causes which tended to shape it. Civic pride, commercial instinct, religious zeal, and an extraordinary vitality which impelled him to do nothing by halves, combined to make the Fleming what he was. Being by nature imaginative and whole-hearted, intensely responsive to the varied calls of a full life and a lover of beautiful things, he shared with all other peoples the world over the desire to give expression to his ideals by the erection of buildings in which should be embodied the spirit actuating the individual no less than the community at large. He was not alone in his religious zeal, for that swept over the whole of Europe like a mighty wave, and in every land the Middle Ages have bequeathed great and wonderful works of architecture which were the direct outcome of that extraordinary burst of enthusiasm for religious expression; but nowhere in Northern Europe can one point to such a series of civic and commercial buildings as those erected to serve the needs of the Communes and to proclaim the pre-eminence of the Flemings in the thirteenth, fourteenth, and fifteenth centuries. Nowhere else were all the conditions calling for a systematized civic architecture so strongly in evidence.

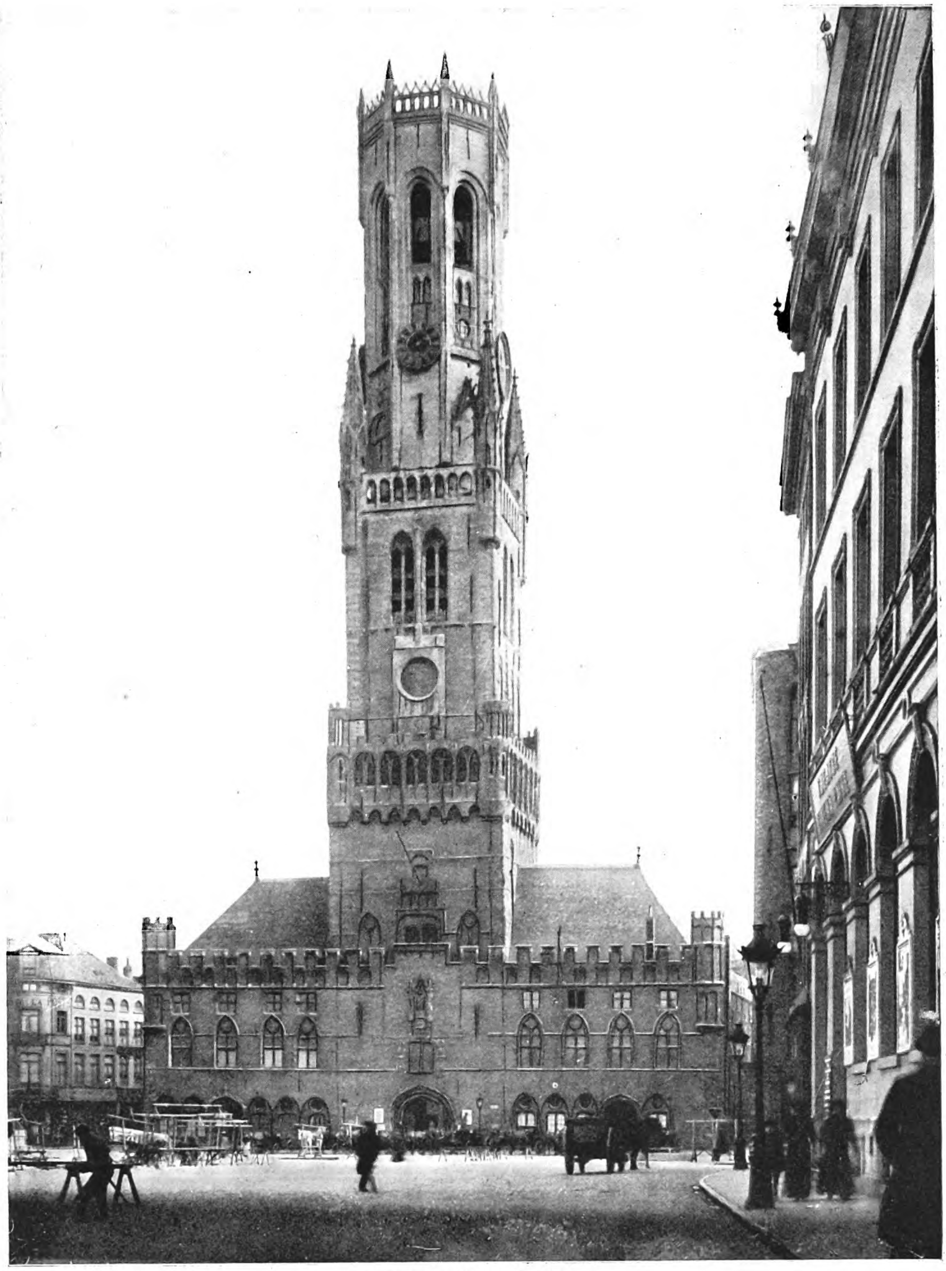
Strange as it may seem, church building almost took a secondary place for a time—not that large and finely conceived churches were not erected, but that ecclesiastical work was eclipsed by the town halls, belfries, market halls, and all manner of secular buildings which arose in response to the calls of civic splendour and domestic affluence. The inevitable tendency to borrow motives from the church builders of Northern France, where the master-masons were showing to the world what could be done with pointed arch and soaring vault, was too strong for the Flemish church builders to resist; but the case was different in regard to civic architecture, and a manner was evolved bearing very strongly the impress of local characteristics. So strongly, in fact, were these developed that they differentiate the architecture from that of any other


BRVGE
Een der voornaamste Steeden van Vlaandren
L'une des Principales Villes de Flandre.
AENWYSINGEN.

MAP OF BRUGES IN THE SIXTEENTH CENTURY, SHOWING DOUBLE MOAT AND FORTIFICATIONS ENCIRCLING THE CITY.



From the Rue aux Laines.

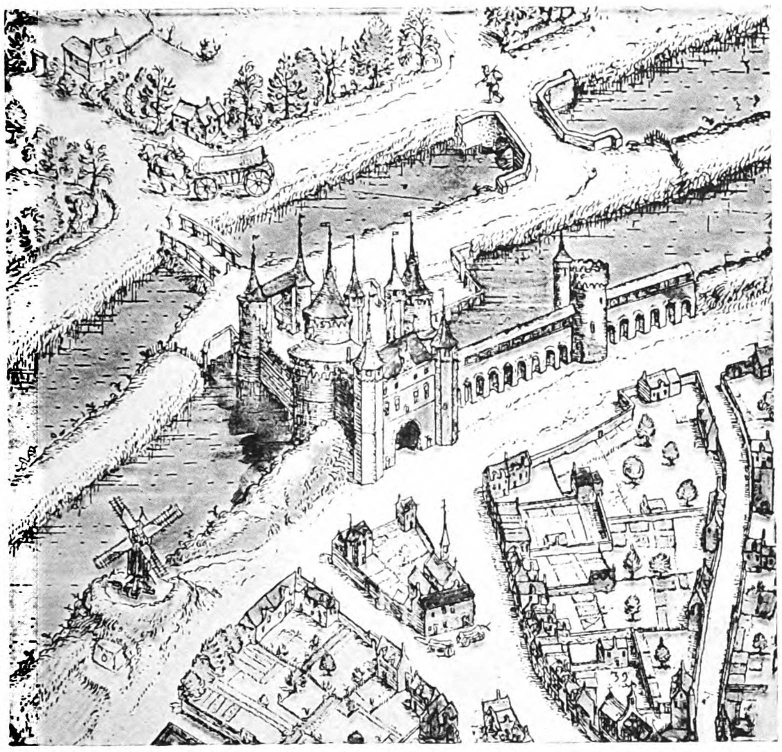


From the Grand' Place.

Plate II. December 1917.

Photos: F. R. Yerbury

THE BELFRY, BRUGES.

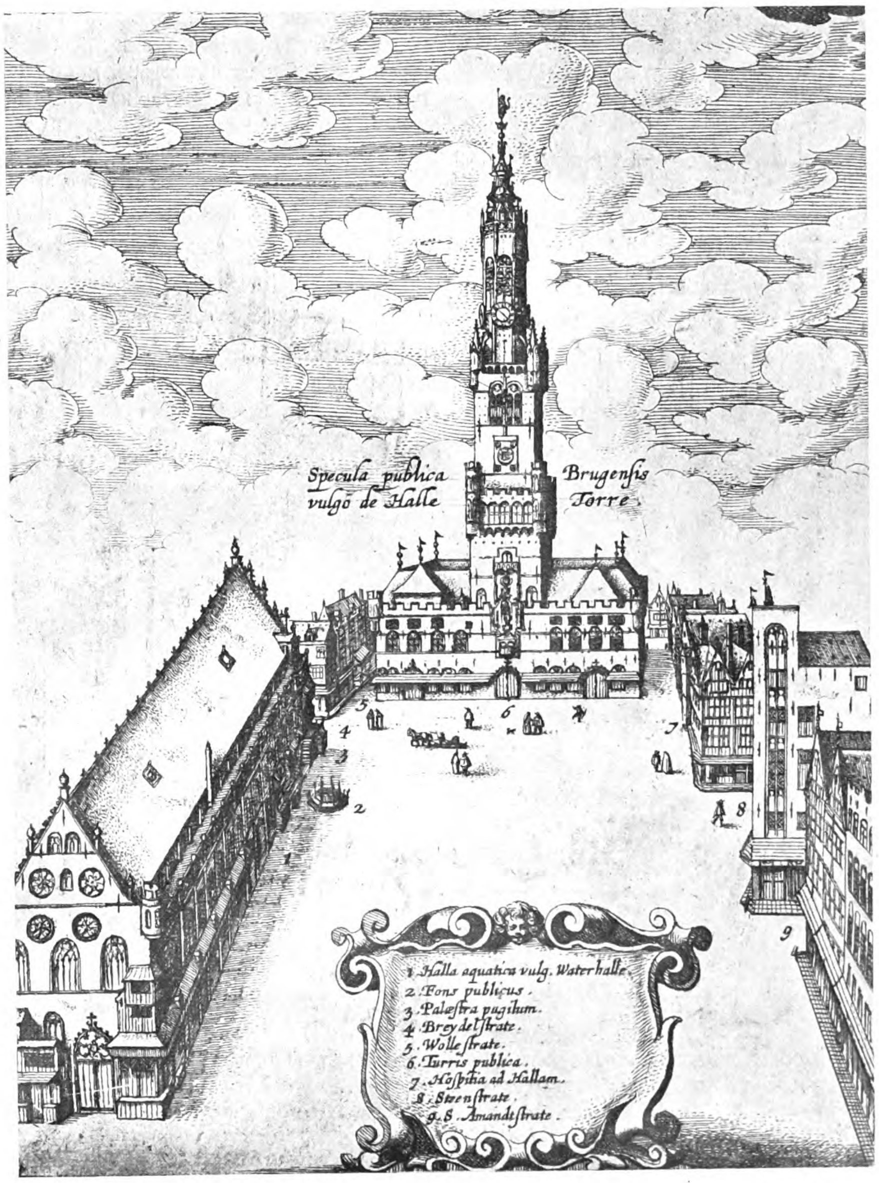


THE PORTE SAINTE-CROIX IN 1562, AFTER MARC GHEERAERTS.

country. First the belfries and *Halles*, and later the town halls and town houses, show this architecture at its best, for the Flemish builders were concerned primarily with towns and cities. It is in the open squares and along the narrow streets and beside the busy quays that one must seek the soul of the Flemish building craft, rather than in the open country or in the streets of the wayside villages.

The secret of the civic and commercial supremacy of Bruges lay in its geographical position in relation to the open sea, and in the astuteness of the Fleming in grasping to the full the advantages of the innumerable waterways which linked up the sea with the sites he chose, for in mediæval times water-carriage constituted the most efficient mode of transport for merchandise of all descriptions. Natural waterways and artificial canals opened the door for overseas traffic, and by their means trade could be carried on with all known European ports—and especially with those coming into prominence on this side of the Channel—once the production of some indispensable commodity had been developed. Skilled in weaving all kinds of woollen stuffs, the Flemish weavers gained a wide reputation at a time when the rest of Northern Europe was either ignorant of the process or engaged in other pursuits. Their supply of the raw material was limited, and without ships to bring the raw wool and to take away freights of woven material they could not have expanded, and without canals and waterways the ships could not have sailed up to the very doors of the emporia and have been moored alongside quays alive with the busy throng of workers. The solution of the problem lay in the assurance of an unlimited supply of wool. England produced the greater part of the wool, and the prosperity of England and Flanders was interdependent; for all the south-eastern part of England, nearest to Flanders, was given over to the production of wool and to increasing facilities for shipping, while the looms of Flemish cities buzzed with the output of costly stuffs. Thus, while the burghers were rearing belfries to proclaim far afield over the level country the prosperity and independence of the little republics of which they were such loyal members, the merchants were organizing overseas trade and developing a far-reaching industry which seemed to bring wealth and prosperity to all concerned in it. Also they were rearing halls for the transaction of their business and palaces for their dwellings.

The Hanseatic League, which was at first an association of individual merchants and later of merchant cities, wielded great powers, and the influence of this immense trading organization was felt all over Northern Europe from the early thirteenth right down to the end of the sixteenth century. In Flanders, at Bruges, Antwerp, Dinant, Ghent, Ypres, and Damme—the port of Bruges—were emporia of the League associated with London and other English centres, and in commercial relations with towns in all countries of Northern Europe. The intercourse between Flanders and our eastern ports was in a large measure answerable for the prosperity of East Anglia, and led in due course, from one cause and another, to the importation not only of ideas but of workers as well, and as a consequence our building arts profited very materially by the interchange of Flemish craftsmen. So long as there were no hindrances to the carrying on of the overseas trade all went well, but the maintenance of the waterways was vital.

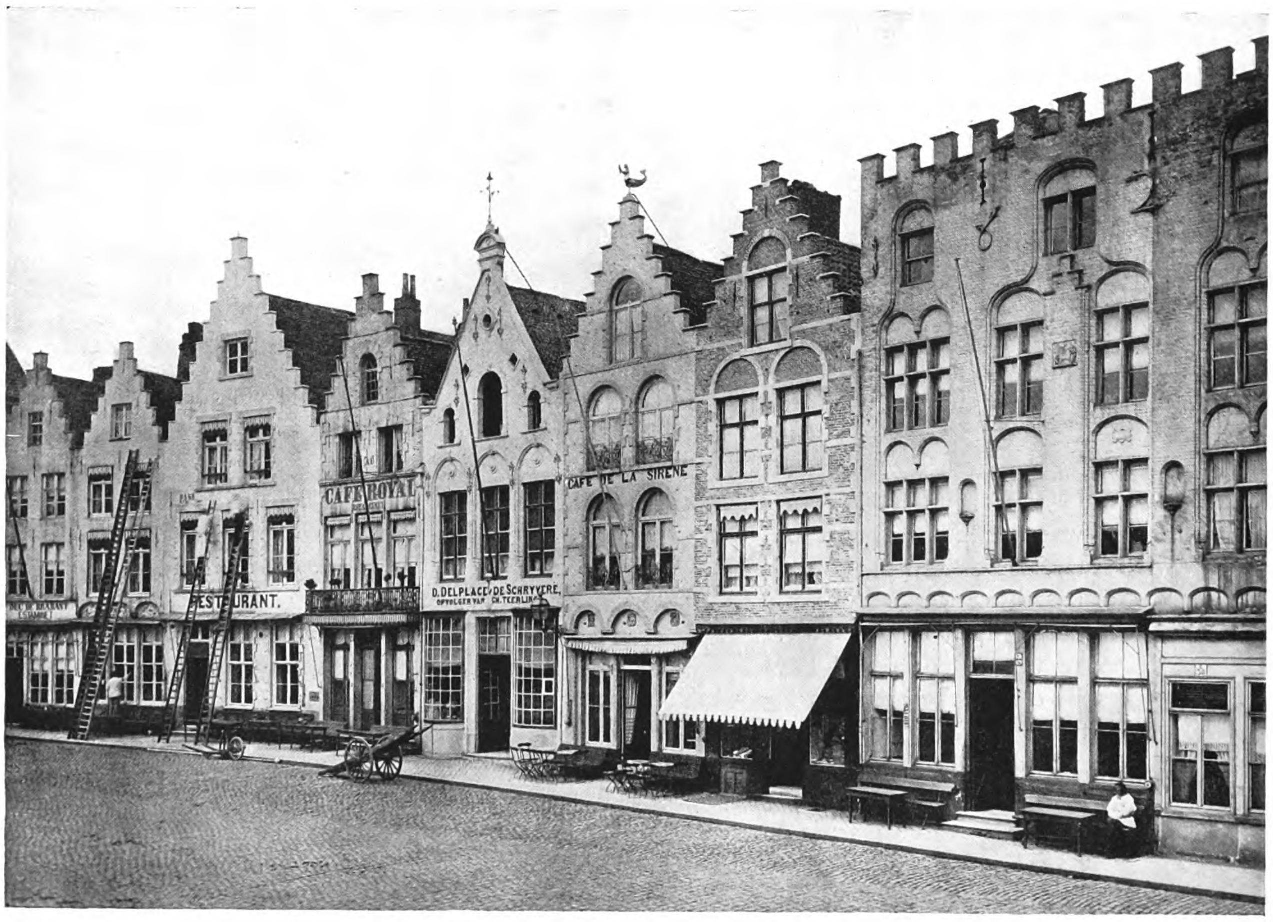


VIEW OF THE GRAND' PLACE ABOUT 1640, SHOWING THE TERMINATION TO THE BELFRY AND THE WATERHALLE (BOTH NOW DESTROYED).

This is forcibly brought out in the story of Bruges, for in spite of turmoil brought in the train of political and religious strife, the surest blow ever dealt at the prosperity of the city came through natural causes such as no man then could combat.

It was no new danger which was threatening the watergirt city in the fifteenth century—the shifting sands of the Swyn sealed her fate. The natural waterway which flowed from the sea past Sluys to Damme and so to the north-eastern quarter of Bruges silted up faster than means could be devised to keep it clear. The time came when ships of any considerable size could only reach the quays with extreme difficulty, and the day followed when they could not get there at all. After the silting up of the Swyn valiant efforts were made to broaden and deepen minor waterways. In the reign of Charles V, the painter-architect-engineer Lancelot Blondeel (1496–1561) urged a scheme which was eventually abandoned, although in modern times recourse has been had to a similar project. Another attempt was concerned with the waterway which ran from the northern part of the city to join the open sea at Ostend. It is this canal which is recorded in such a delightful manner in the original water-colour drawing made presumably between the years 1664 and 1668 and reproduced on Plate I. The inscription on this drawing in quaint English and in four other languages runs: "Bridges before the troubles was a city famous for traffic throughout Europe: 17 outlandish nations from ancient times had their consul houses therein. It doth now again begin to recover its former splendour thro' the bounty of his Cath: Majte: and the order of his Excy. the Marquis of Castel Rodrigo, by the inlargin of the river of Ostend with the waters of the Flemish ocean, 18 foot in depth capable of vessels of 200 tunne, with a spacious harbor free from all stormes and inconveniences of ebbings and flowings, a fit place for the repairing and building, and a large Kay for landing and loading of goods, all which is compased with strong fortifications." It will be seen from this drawing and from the map reproduced on page 112 that the city is encircled by canals and natural or artificial waterways; it seems to have reached the limits of expansion, as defined by these waterways, towards the end of the thirteenth century.

Apart from the vital importance of such means of communication to the furtherance of commerce, it must not be forgotten that in early times a belt of water provided one of the most valuable means of defence from the onslaughts of outside foes. Just as all through the Middle Ages a moat was looked upon as the readiest way of protecting a castle or a dwelling-house situated in flat country—till the introduction of cannon made such defensive methods useless—so the encircling canals were the best means of natural defence to these Flemish towns, and the burghers knew it. The system of further protecting the town by means of strong encircling walls seems to have been very completely carried out at Bruges, and a number of fortified gatehouses were disposed at suitable points for ingress and egress. The amazing irregularity of the lay-out of the town as a whole arose, doubtless, through a desire on the part of the early builders to conform as far as possible with the turnings and twistings of the internal canals no less than with those of the little river Reie, which necessitated many bridges. Although many of these canals have been filled up or diverted, the mediæval irregularities of the streets have never been lost; of the encircling walls and fortifications, some four and a half miles in circumference, practically nothing has survived, but considerable remains of four of the six principal gatehouses or *portes* are still to be seen.* Several fine buildings, too, were



HOUSES ON THE NORTH SIDE OF THE GRAND' PLACE.

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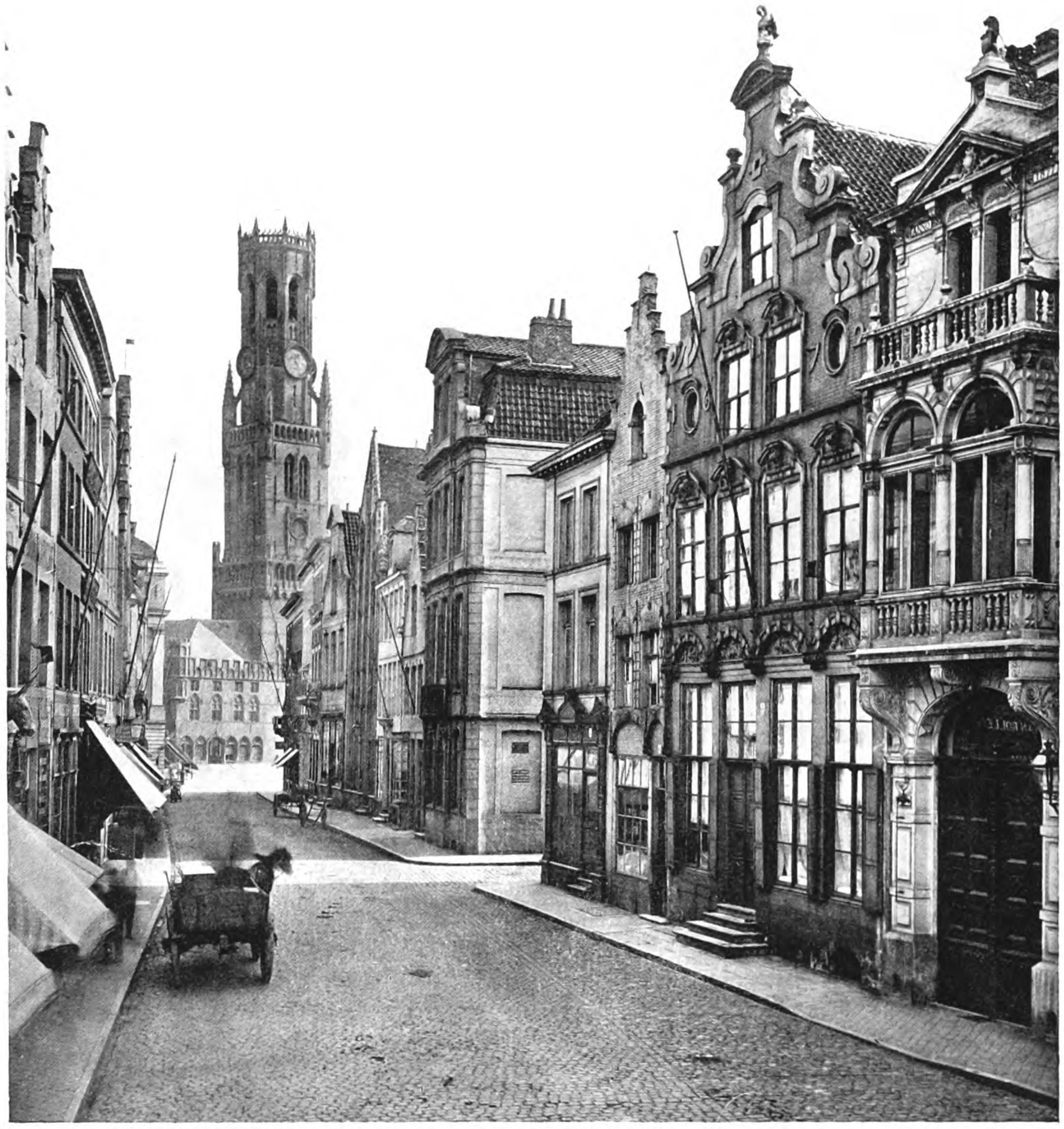
* The walls were razed in the nineteenth century, and the old ramparts turned into promenades.

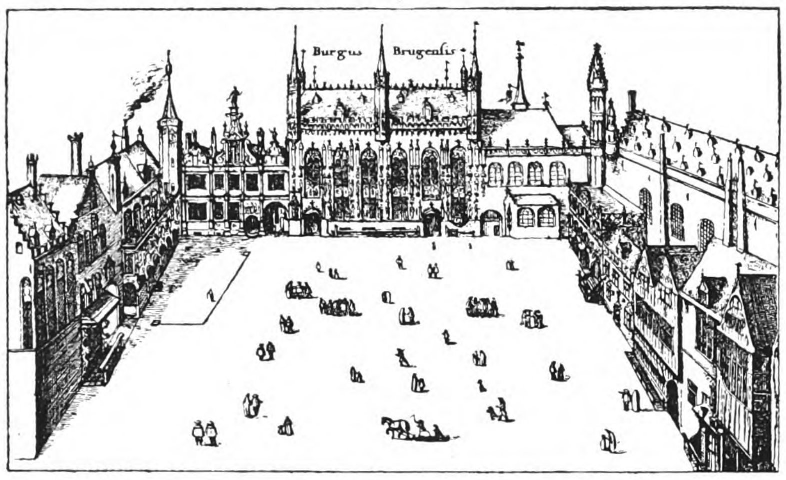
swept away during the evil days that marked the period of decline, and many others were long ago mutilated almost beyond recognition; in fact, without a wonderful bird's-eye view of Bruges, engraved by Marc Gheeraerts in 1562, one would be at a loss to fill in many links which are obviously missing.

In those days interest circled chiefly around the Grand' Place and the Place du Bourg. All the world knows about the Grand' Place and its Belfry, for surely those who have not heard the carillon with their own ears have read the lines written by Longfellow and many another poet. But it is not so generally known to what an extent the Grand' Place has been robbed of the greater part of its charm through the vandalism of later ages. The canal which formerly ran along the east side of the Belfry and beneath the Waterhalle, as seen in Gheeraerts' view (illustration on page 111), has been filled up, and the Waterhalle itself demolished, with the result that the principal *Place* has lost much of its character. It was naturally in the Grand' Place that the most stirring scenes in the grim early history of Bruges were enacted, and that the most sumptuous pageantry was displayed in the triumphant days which characterized the period of Burgundian rule.

The foundations of the existing Belfry seem to have been laid about 1290, and the wings, which form the *Halles* and enclose a courtyard, as at Ypres, were added in 1364. It was not till late in the fifteenth century that the square Belfry tower was carried higher by the addition of an octagonal lantern and a lofty flèche (illustration page 113). This metal-covered flèche was struck by lightning in 1493, but it was quickly set up again and surmounted by a huge vane which most authorities agree was in the form of the Lion of Flanders. The Belfry with such a rich termination must have been one of the most gorgeous monuments that ever pierced the western sky, but since 1741 it has been robbed of its proper culmination, for no attempt has been made since its destruction in that year to reinstate so vulnerable a feature, and the existing commonplace parapet and eight-angle pinnacles have had to suffice for just ninety-five years. Scarred as this building unquestionably has been in the past, it is still a *monument historique* of the first importance, and the interior courtyard with its gallery at the southern end is unusually impressive. Within its walls at the outbreak of war was one of those priceless collections which throw so much light on the lost art and craft of building in a locality, and which the Belgian people, with admirable zeal and devotion, had preserved for the enjoyment and enlightenment of all who shared with them their appreciation of a bountiful heritage of beautiful things. One trembles to think of what may have happened to many treasures of the smith's craft, and even to Marc Gheeraerts'



VIEW IN THE RUE FLAMANDE, WITH THE BELFRY IN THE DISTANCE.



THE PLACE DU BOURG, SHOWING THE HÔTEL DE VILLE, ANCIEN GREFFE, AND CHURCH OF ST. BASIL.

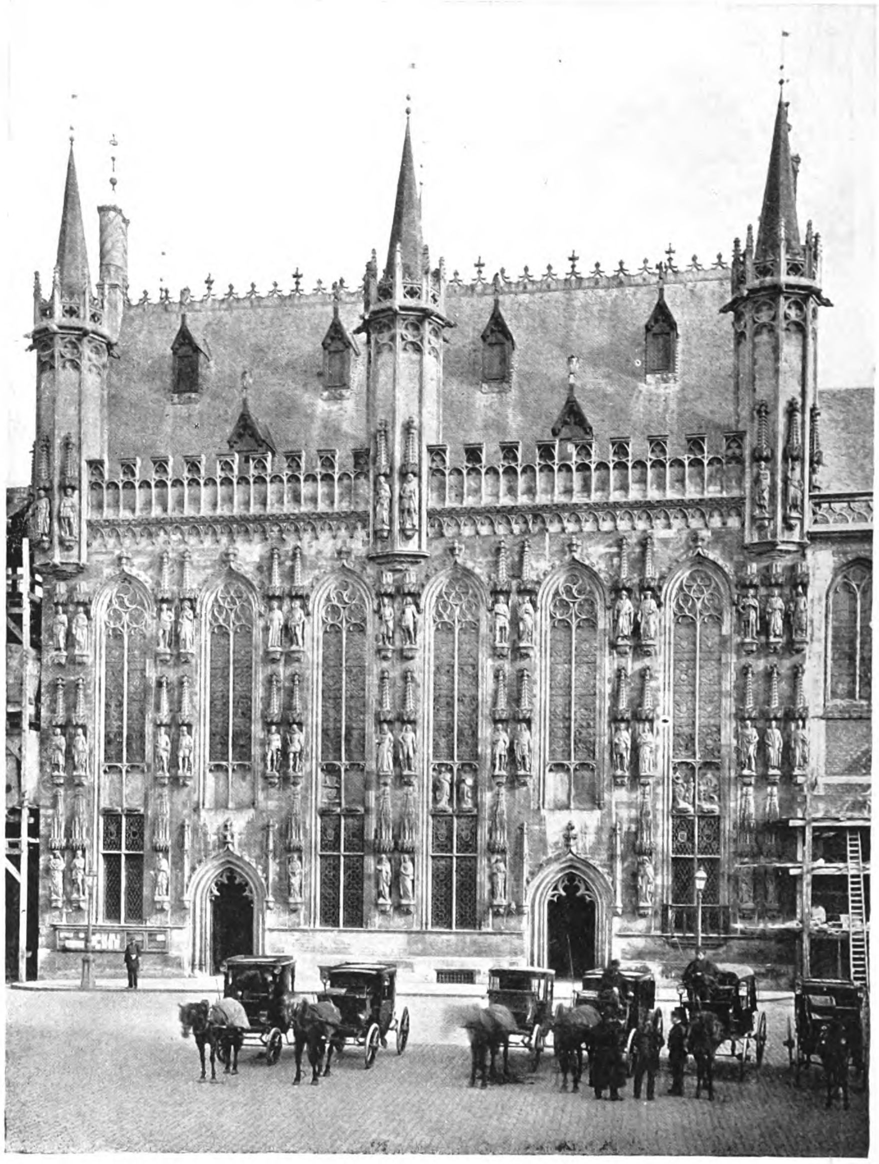
original copper plates, which had survived all manner of misfortune; while rumour says that the bells which for so long had given out their notes from the topmost stage of the Belfry have already gone the way of most things metal in these ruthless days.

On the west side of the Grand' Place, one building at the angle of the Rue St. Amand has come through all the changes with remarkably little alteration; this is the Hôtel Bouchoute, erected in the latter part of the fifteenth century in the severe manner of the earlier brick façades. This building is seen in the view reproduced on page 113, and, with its metal vane showing above the flat roof, is a familiar object in old paintings and prints of the Place. The remaining façades on this side have all been more or less modernized, and the façades on the north side, facing the Belfry, are noticeable for their picturesque array of gables rather than for any attempt to arrive at a studied composition (see illustration, page 114). The site of the church of St. Christophe has long since been built upon, and there is not much to detain the architect hereabouts when he has once realized the value of such a great open space in the midst of countless tortuous streets.

Around the other Square or Place du Bourg were grouped some of the finest buildings in Bruges. The Hôtel de Ville, the Ancien Greffe, the Palais du Franc —which supplanted the Loove Palace, and on the site of the greater part of which now stands the Palais de Justice—the church of St. Basil with the chapel of Saint-Sang, and the cathedral of St. Donatian, all stood here. These have survived in some form or another with the exception of the cathedral on the north side, an idea of which is obtained from Gheeraerts' view (page 111). From all accounts this must have been a striking early Gothic church, inspired by French models; but it was swept clean away by the French revolutionists at the end of the eighteenth century, and rows of chestnut-trees now cast their shadows on the site.

The Hôtel de Ville, illustrated on this page, bears externally as many signs of ill-usage as the Belfry; it was begun in 1376, but it was not until the fifteenth century that the whole building was completed with its rich series of stone traceried windows and sculptured niches. The angle turrets, beloved of the Flemings, are conspicuous here; but there seems to be no justification for the central turret, as there is nothing in the orderly division into bays of the whole façade to call for the accentuation of the central pier. The architecture of Bruges, however, is not academic, for reasons that will be discussed later. Bruges owes much to the exuberant character of Flemish craftsmanship, and it is seen in this façade no less than in those adjoining it; but the restorer's hand has perforce been busy, and evidences are not difficult to detect. The statues now filling the niches are modern works, but the originals were from the chisels of the best craftsmen, and it is recorded that Jean Van Eyck with his own hands painted and gilded six of them. The interior will be best remembered for the elaborate wood roof with pendants, dating from 1402, and for the fine scheme of colour decoration carried out by Albrecht de Vriendt, and completed by his brother Juliaan, about the year 1895. These wall paintings on a large scale depict some of the memorable scenes which have left their mark on the early history of Bruges, and include the "Return of the Brugeois from the Battle of the Golden Spurs at Courtrai in 1302"; "Count Louis de Maele laying the foundation of the Hôtel de Ville in 1376"; "the Magistrates of Bruges renewing the privileges of the Hanseatic League"; the "Opening of the new Swyn Canal in 1404"; and the "Foundation of the Order of the Golden Fleece by Philip of Burgundy at Bruges in 1430." It is to be hoped that no harm will befall this monument of native art.

(*To be continued.*)



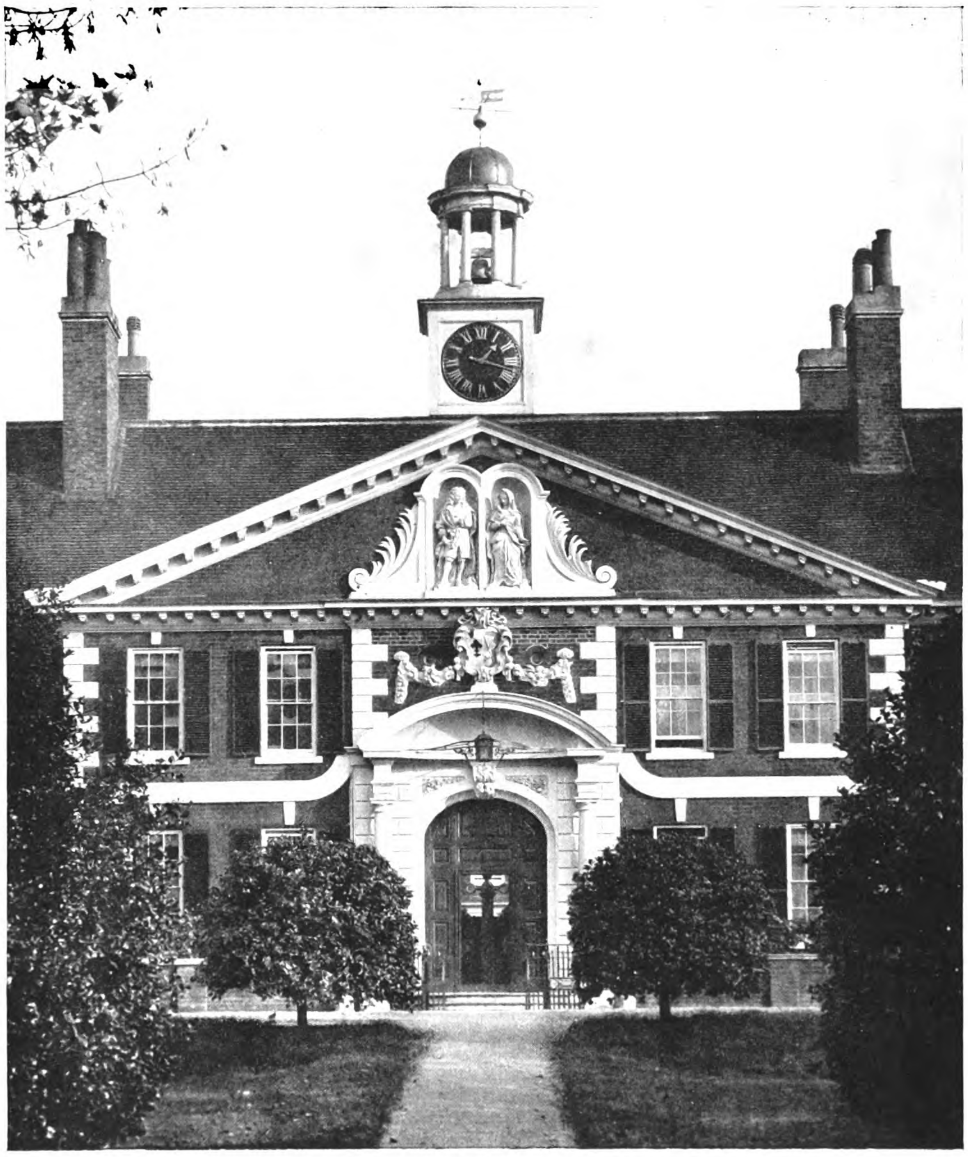
THE HÔTEL DE VILLE IN THE PLACE DU BOURG.

"HOMES OF REST": ALMSHOUSES AS WAR MEMORIALS.—I.

By MERVYN E. MACARTNEY, B.A., F.S.A.

IT is a pleasant custom of most civilized peoples to wish to commemorate great events in the life of the nation or their own by some tangible expression of their feelings—often by the foundation of public buildings for the relief of those less happily endowed with this world's goods. These endowments take various forms; in mediæval times, of colleges for education, such as are found at Oxford and Cambridge; also of almshouses for men and women of decayed fortunes. These we light upon scattered through the length and breadth of the land. Few towns there are that do not possess some such institutions—founded in most cases by pious individuals for the relief of poor or infirm residents of the various parishes where they are located.

Unfortunately, their administration often fell into wrong channels and led to grave abuses; hence the creation of a Central Board for their control called the Charity Commissioners. Whilst this change in the administration of these funds produced greater efficiency, it also produced a divorce between the local and personal character of these endowments. Hence the feeling has arisen that, though a man might grant money, lands, and building for his neighbourhood, all might be gradually absorbed in a body administered from a distance and without the direct and intimate connexion of particular place or district. The natural result has been that benefactions of this kind have almost died out.



MORDEN COLLEGE, BLACKHEATH.

Sir Christopher Wren, Architect.

The fear that the foundation of a home for the decrepit members of a parish, however carefully the deed of gift might be worded, might in time be turned to some other purpose, seems to have dried up this fount of benevolence. This is a great loss to the community, and especially so at the present time, when a large field for the exercise of such generosity might be most usefully employed. Owing to the widespread bereavement amongst persons of wealth, a natural and native desire to commemorate the loss of a member of the family by erecting some permanent memorial that would alleviate the conditions of the community in which they live has been frustrated. With the object of advocating the encouragement of this idea, I introduce the subject in this number, and have brought together views of some of these buildings to show how interesting and beautiful they can be made.

Some would say that by endowing a cot in a ward of a hospital they would thereby achieve their intention; but a hospital in a county town is not the same thing as a group of almshouses for a village. The personal note is absent. A memorial window in a church has no effect in ameliorating the lot of those stricken in the War or the fortunes of those left to battle with the world. But, by providing a home and a garden, much can be done to soften the rough edges of adversity.

The purpose of this article is to enter a plea for the favourable reconsideration of this subject on various grounds. For one thing it means the revival of a thoroughly English sentiment, and the consequent benefit to the community by the erection of permanent dwellings for those stressed by this disastrous War. It is a large subject to cover in a short article, but an outline of what might be done may be briefly set out here.

How the subject has been dealt with by our ancestors is both interesting and instructive. The construction of society has altered in the course of time, and the middle classes have been left in a sort of backwater, unregarded by those of wealth and by the Government because from a variety of causes—partly pride, partly because they are politically unimportant—they are inarticulate. Through pride they shrink from advertising their necessities, and do not combine to force their claims on the Government, as working classes do through trade unions and strikes—they cannot dig, and to beg they are ashamed. As a result, when misfortune overtakes them they are powerless to weather the storm.

When this War ceases a vast number of widows and fatherless children will be left adrift at the world's mercy. The pension in many cases will not suffice to keep them in the condition of life that they have been brought up in. Homes of rest for those whose fortunes have been wrecked should appeal to the generosity of those whose means have been augmented by the War or left practically undiminished. Already cases of this kind are becoming too frequent, and they will increase. If a scheme for the improvement of the material condition of those broken in the War can be started a really beneficent work can be set on foot.

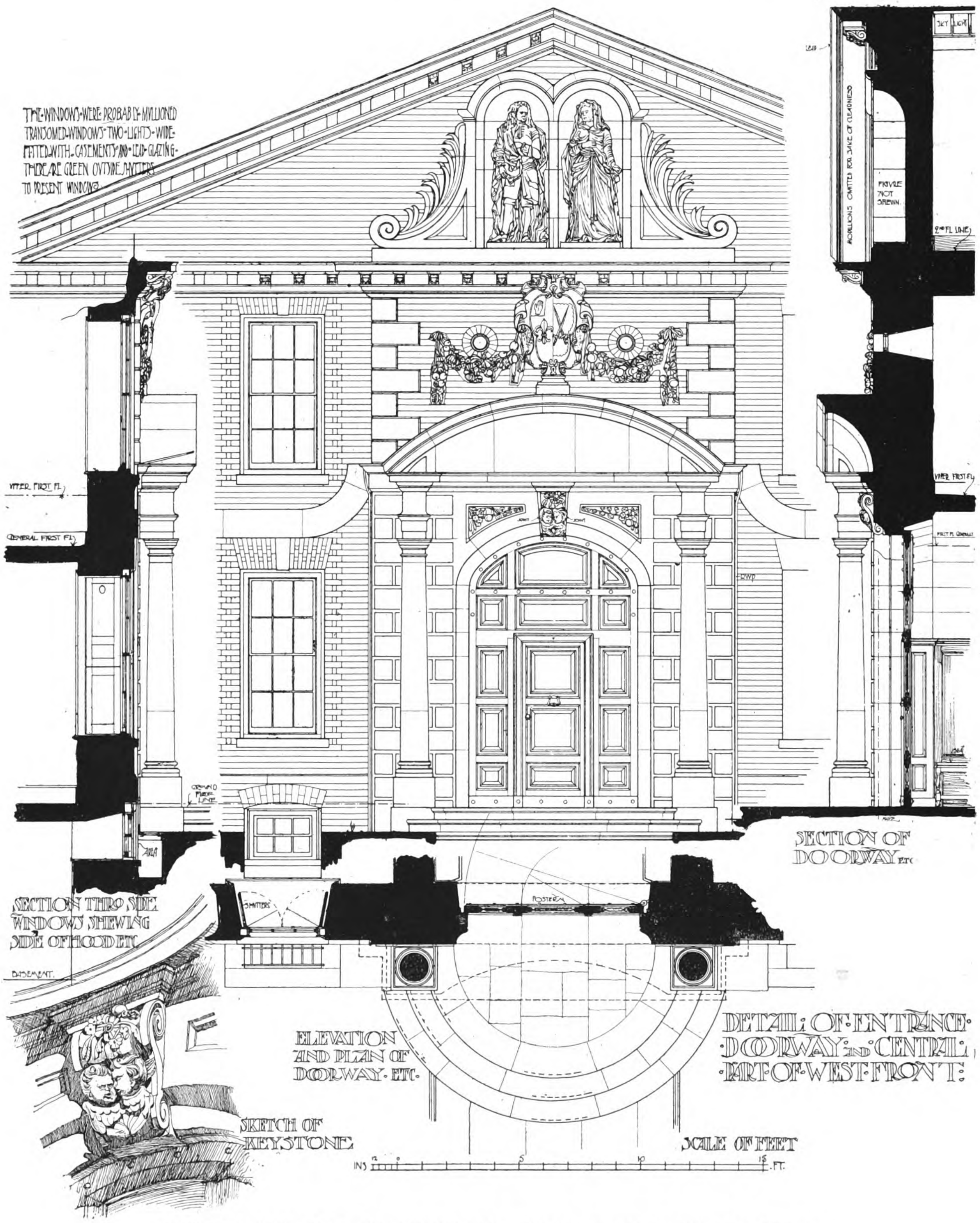
Morden College, Blackheath, Kent.

The following interesting particulars are extracted from an article on Morden College by Mr. T. Frank Green, which appeared in the Review some years ago.

The college stands very much as originally built, hidden away in its own grounds in the south-east corner of the heath; and a casual visitor would hardly be aware of its existence. It was founded about 1695 by Sir John Morden, Bart., as a home of rest for reduced gentlemen, merchants of the City of London, for whose relief, of all the foundations in and about London for distressed people of all sorts, there had been none erected before. Sir John himself had tasted adversity, and had a fellow-feeling for those who might be likely to feel the pinch of want.

He appears to have been the only son of George Morden, Esq., of London, citizen and goldsmith, and Mary, daughter of Thomas Harris, Esq., of London. He was created a baronet in 1688, and the title died with him.

A record in the Heralds' College gives the date of his birth as 23 August 1623, but the parish register of St. Bride's,


THE WINDOWS WERE PROBABLY MULLIONED TRANSOMED WINDOWS TWO LIGHTS WIDE FITTED WITH CASEMENTS AND LEAD GLAZING. THERE ARE GREEN OUTSIDE SHUTTERS TO PRESENT WINDOWS
GROUND FLOOR LINE
AREA
SECTION THRO SIDE WINDOWS SHEWING SIDE OF HOOD ETC
BASEMENT
SHUTTERS
POSTERN
SECTION OF DOORWAY ETC
ELEVATION AND PLAN OF DOORWAY ETC
DETAIL OF ENTRANCE DOORWAY AND CENTRAL PART OF WEST FRONT
SKETCH OF KEYSTONE
SCALE OF FEET
INS 12 0 5 10 15 FT.

MORDEN COLLEGE, BLACKHEATH: DETAILS OF MAIN DOORWAY.
Measured and drawn by T. Frank Green. Details of Door measured by A. J. Healey and drawn by A. Bough.

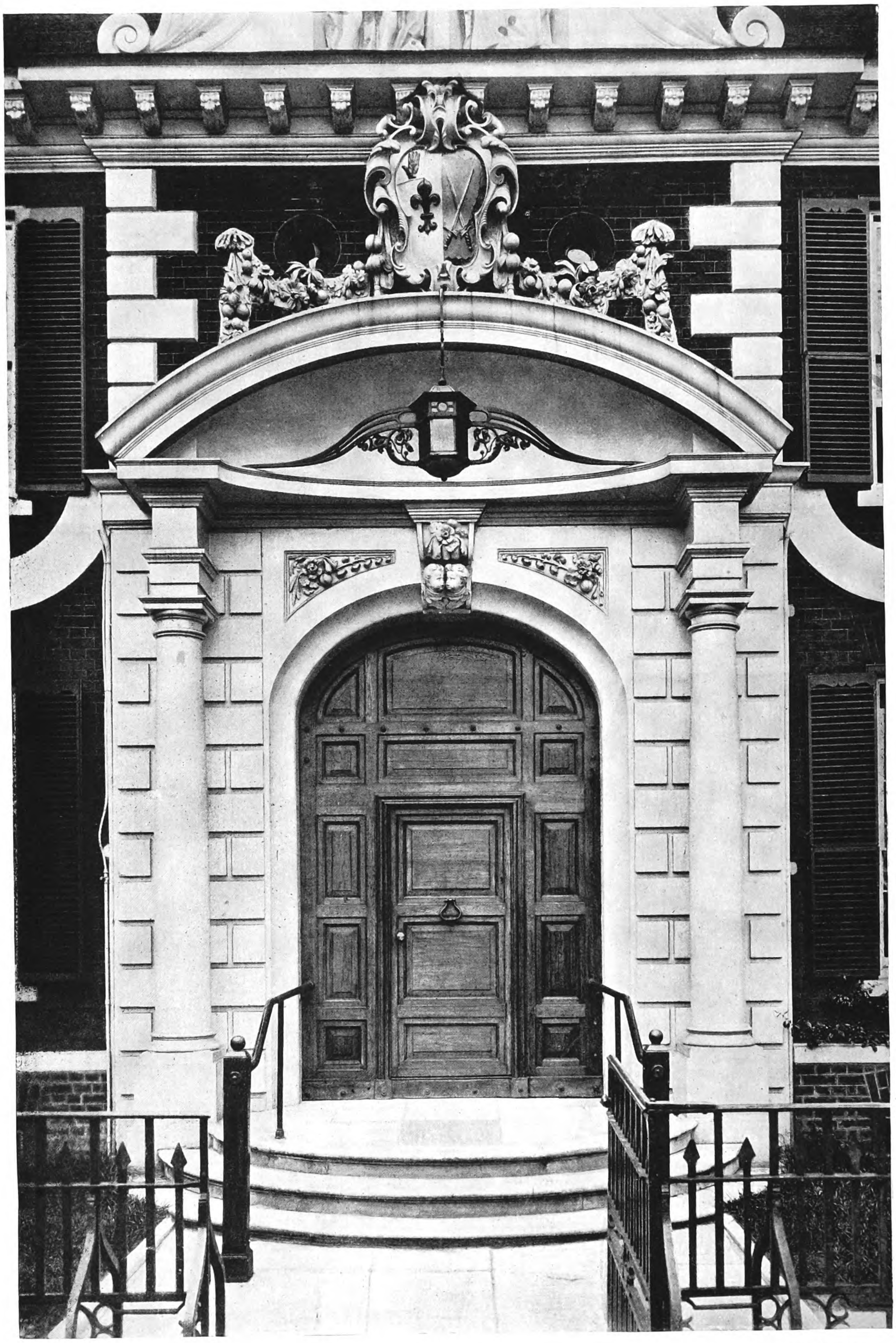


Plate III.

December 1917.

MORDEN COLLEGE, BLACKHEATH: MAIN DOORWAY.

Sir Christopher Wren, Architect.

London, in which parish he was born, mentions the date as the 13th. Such registration errors, however, are not unknown even in recent times. In the register of pedigrees of the Heralds' College bearing his arms and crest and attested by his signature, he does not trace his ancestry higher than his grandfather, Robert Thurloe, of Suffolk, nor does the certificate of his death drawn by the Somerset Herald of Arms contain more than mere mention of the names of his father and grandfather, whereas it enters minutely into the kin of Dame Susan, his wife, the daughter of Joseph Brand, Esq., of Edwardstone, Suffolk, and gives the names and matrimonial alliances of her brothers and sisters and the names of their descendants.

Stow gives the arms of Simon Morden, Mayor of London in 1369, which are the same as those borne by Sir John. They are: argent, a fleur-de-lis gules, with the arms of Ulster, with crest a lion passant; those of the Brands, his wife's family, being azure, two swords in saltire argent, the hilts or, with a border engrailed of the second.

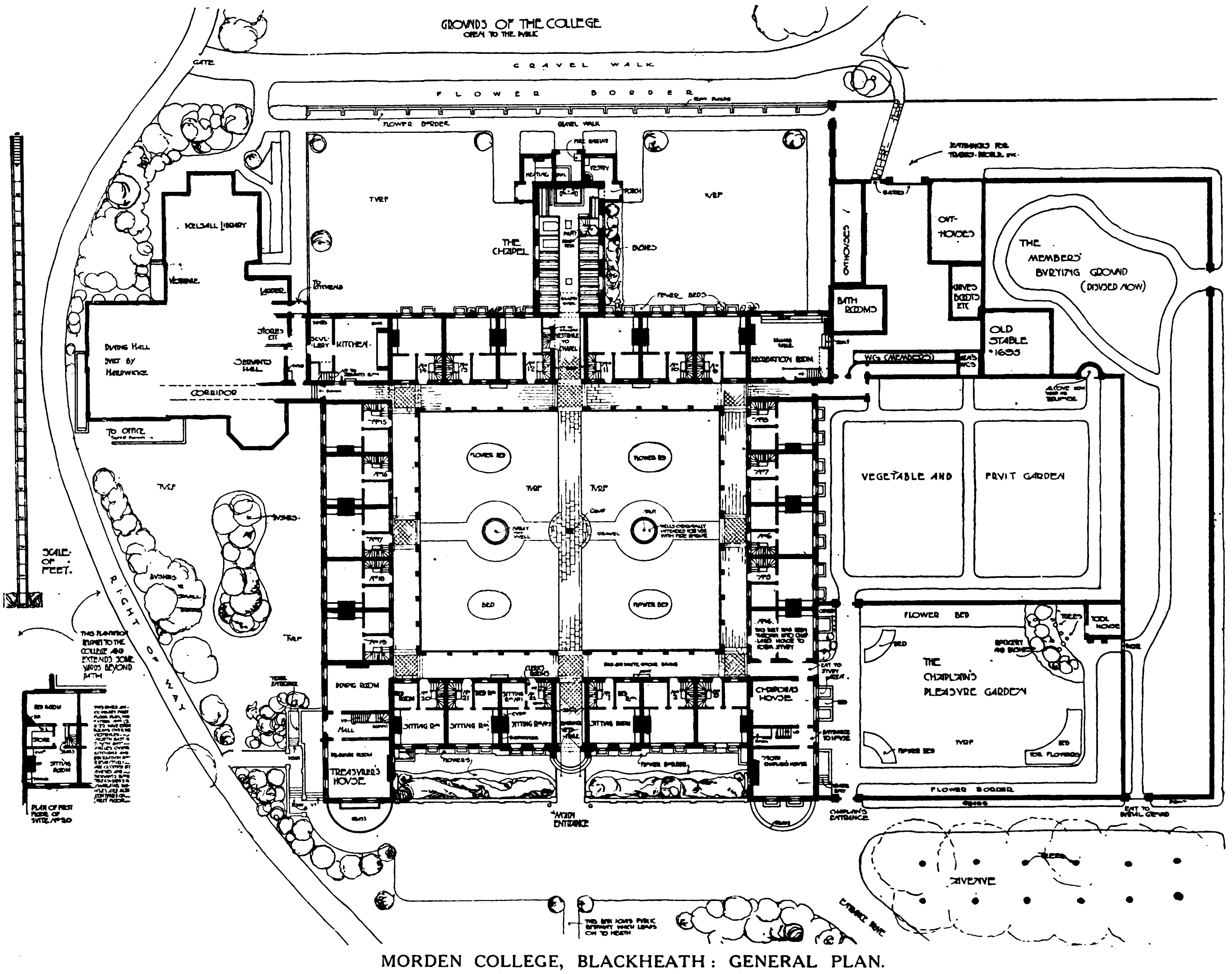
At the period of Sir John's entry into commercial life, the members of the Turkey Company were carrying on an extensive trade with the Levant in woollen cloths, lead, pewter, copperas, logwood, and pepper. They also took out with them dried fish, sugar from British colonies, and other produce, which being sold in Portugal, Spain, and Italy for pieces of eight, gave them the wherewithal to purchase homeward cargoes.

Sir John became a member of the company, and was very successful in his transactions, entering into them personally, and even undertaking a voyage to the Levant, where he is supposed to have resided for some time, Stow saying that he returned from Aleppo with a very fair estate.

He at this time enjoyed great worldly prosperity, and owned many ships; but the tenure of riches was then, as ever, precarious, and he lost the whole of his property and was reduced to poverty. It seems, from some expressions in his will, that his fleet was lost at sea.

In addition to defraying the cost of building the college, Sir John also amply endowed it by his will of 15 October 1702 with the whole of his estate, both real and personal, subject to a few small legacies and to a sufficient income and property being retained by Lady Morden during her life to enable her to live in a style befitting her position, the whole being at the disposal of the college at her death. These dispositions occupy the first part of the will, the remainder dealing with the endowment and foundation of the college, its rules and officers, its management, and the pensions to be paid to members. Mention is also made of the "gownes all alike" which they are to wear.

Unfortunately no pictorial record of these seems to exist, and a writer in "The Stranger's Guide" of 1787 said that even at that date the gowns with founder's badge formerly worn had

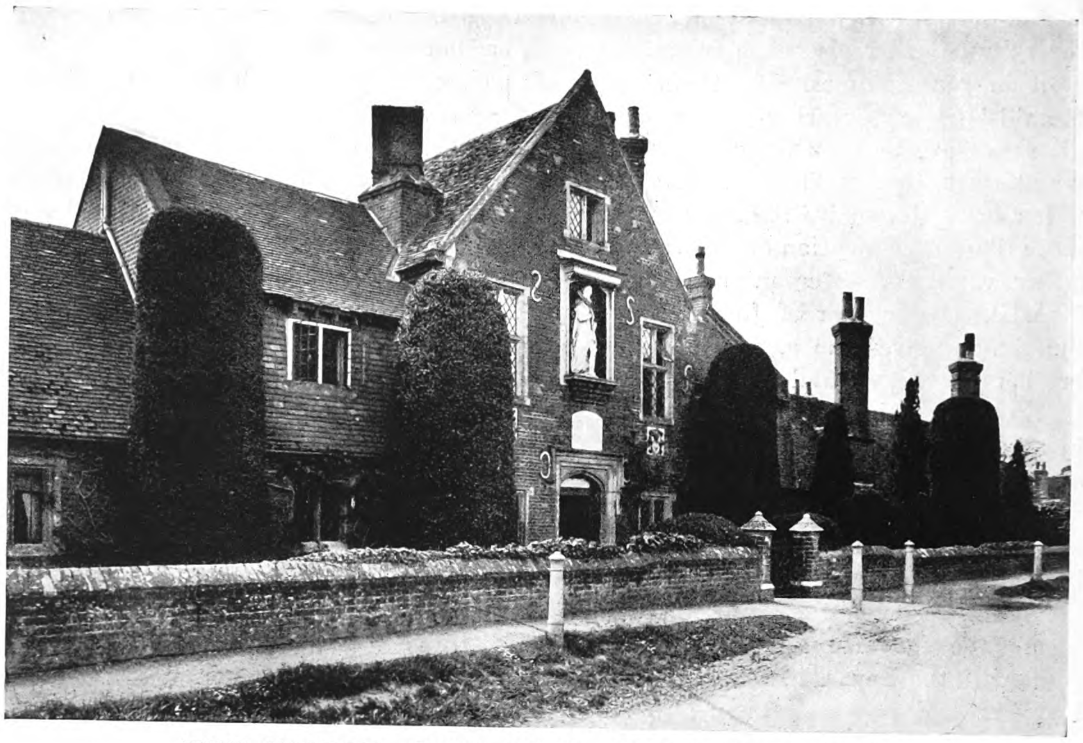


MORDEN COLLEGE, BLACKHEATH: GENERAL PLAN.
Measured and drawn by T. Frank Green.

been discarded for some years. The badge was of silver, oval in form, bearing the arms of Morden and Brand.

There were to be in the college as many poor merchants as the foundation would maintain, who were to have rooms and £20 yearly each. The officers were to be a treasurer at a salary of £40 a year, a chaplain at a salary of £30 a year, each residing in the college; further a cook and butler, the latter also to be clerk of the chapel, were also to be provided at £10 a year each, with board and lodging.

The management was to be in the hands of visitors or trustees appointed by the will (including Sir John's wife, Dame, or Lady, Susan), for whose entertainment during the yearly visitation a sum of £10 was to be set aside, to be expended in a dinner for themselves and provender and stabling for their horses; and rooms were also to be provided for the reception of the visitors.



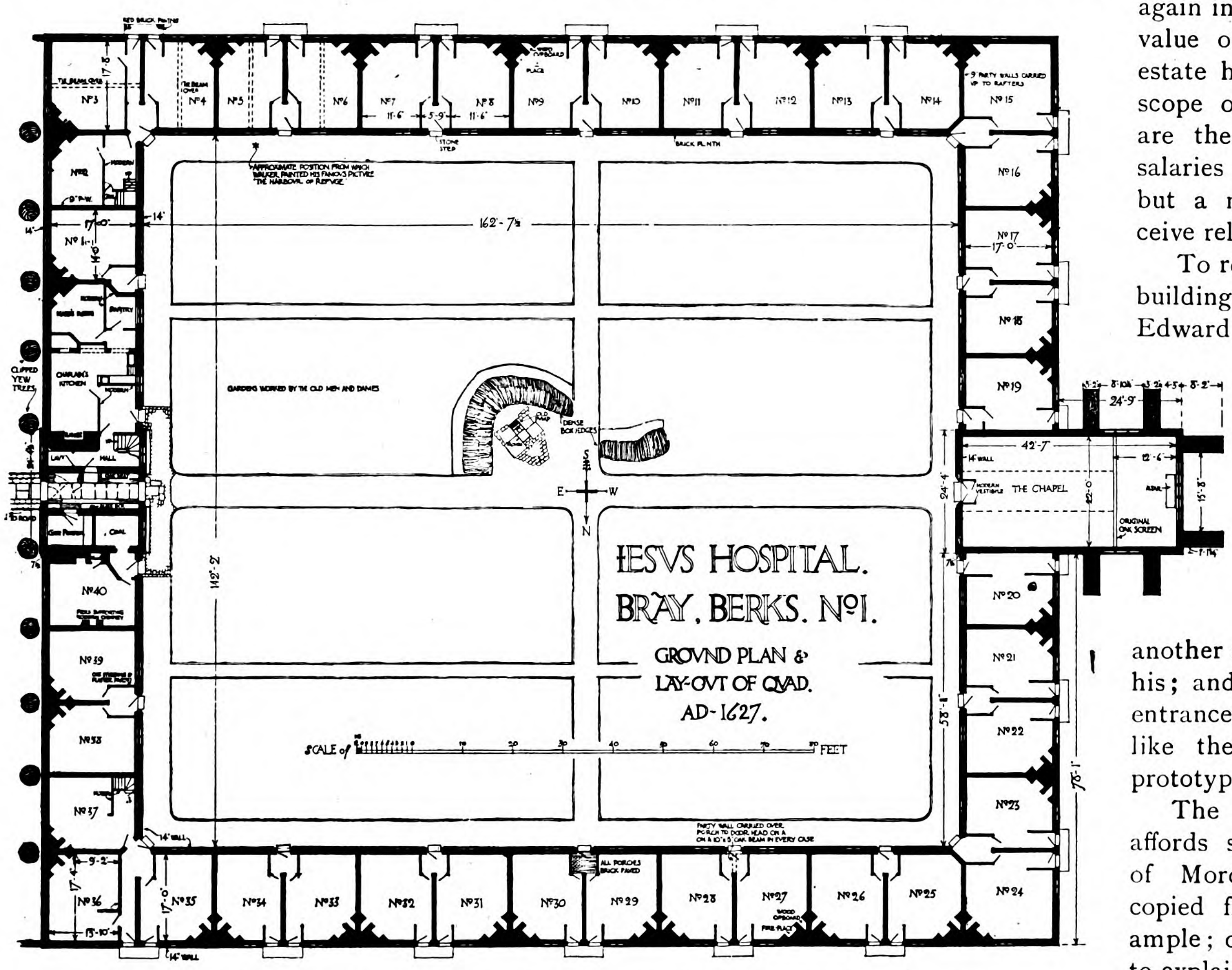
JESUS HOSPITAL, BRAY, BERKS: FRONTAGE TO ROAD.

At the decease of any two of them, other Turkey merchants were mentioned as their successors. At the death of these, further trustees to fill the vacancies were to be chosen from the Turkey Company to keep the number up to seven, "and if that Company fail," says the will, then they should be chosen out of the East India Company; "and if that Company fail, then out of the Court of Aldermen of the City of London, and if the Court of Alderman fail" the visitors then surviving should at the death of any one of the seven choose a gentleman of Kent to fill the vacancy.

A codicil states that as the House of Commons has rejected his application for a remission of taxation for the college, he is obliged to reduce the yearly pension to £15; and after his death, "some portions of the estate not answering as well as expected," Lady Morden was obliged to reduce the number of members also, which, however, at her decease was again increased. The increase in the value of the property held by the estate has since much enlarged the scope of the charity, and not only are the pensions to members and salaries of officials now more liberal, but a number of out-pensioners receive relief.

To return to a consideration of the building itself. It was carried out by Edward Strong as master mason, and the details suggest that the general scheme, which is masterly, was alone supplied by Wren, and that in this case he did not supply drawings of the "mouldings in great," as he has recorded his willingness to do for another and more important work of his; and it cannot be said that the entrance doorway reaches anything like the standard of its supposed prototype at Bromley.

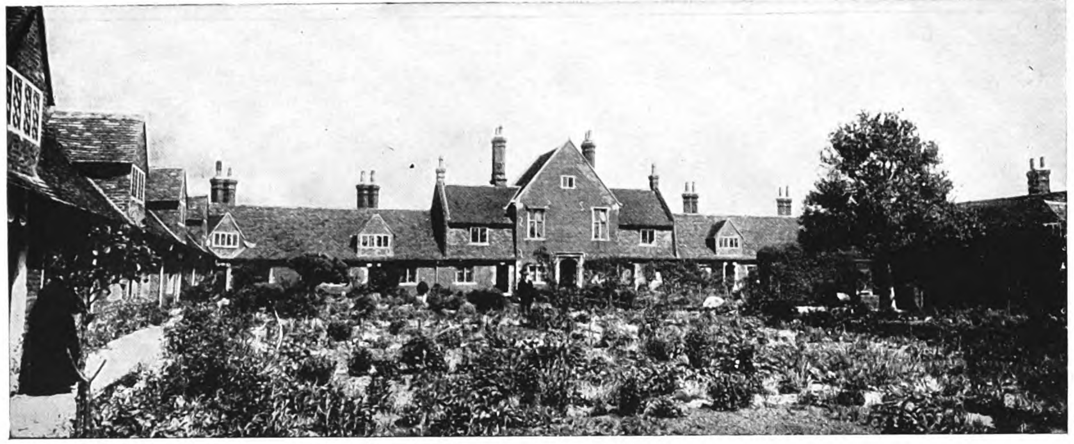
The similarity between the two affords strong evidence that the door of Morden College was actually copied from the last-mentioned example; otherwise it would be difficult to explain the inferiority of the Blackheath design. A badly made sketch by Strong would account for this.

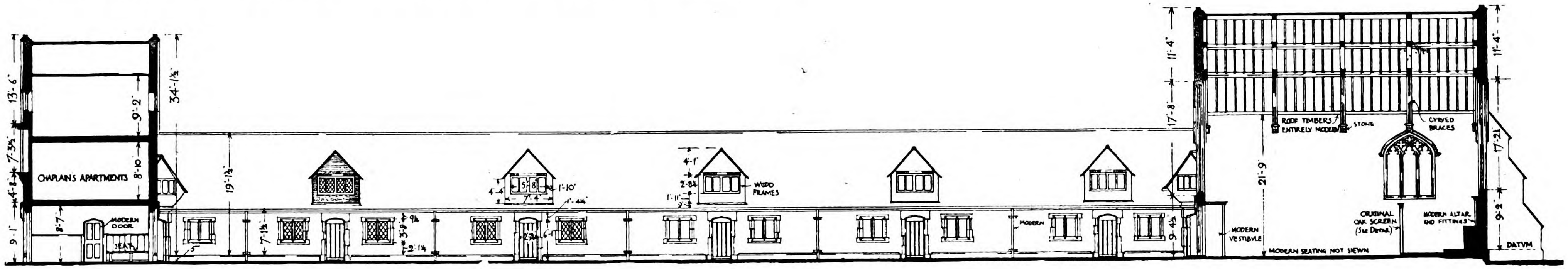


JESUS HOSPITAL, BRAY, BERKS: GROUND PLAN AND LAY-OUT OF QUAD.

Measured and drawn by J. C. Rogers.

IESVS HOSPITAL, BRAY, BERKS.

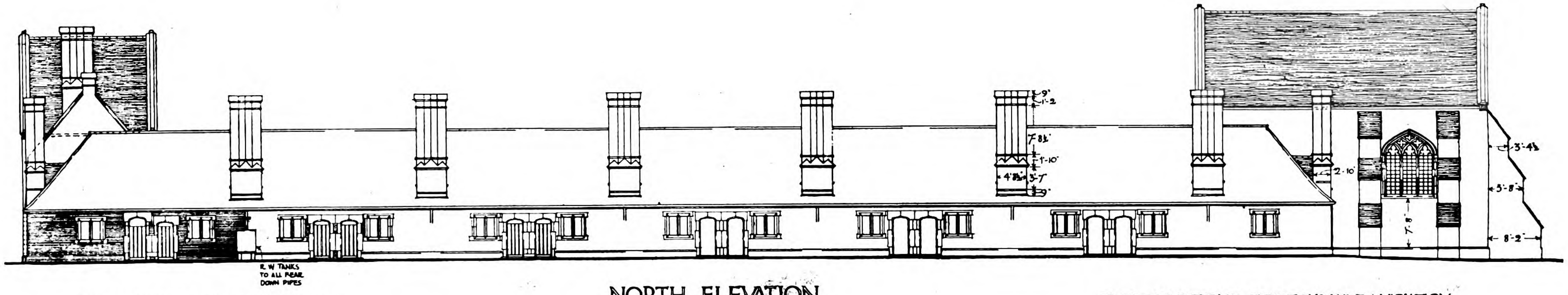




GATE-HOVSE

SOVTH ELEVATION IN QVAD.

THE CHAPEL



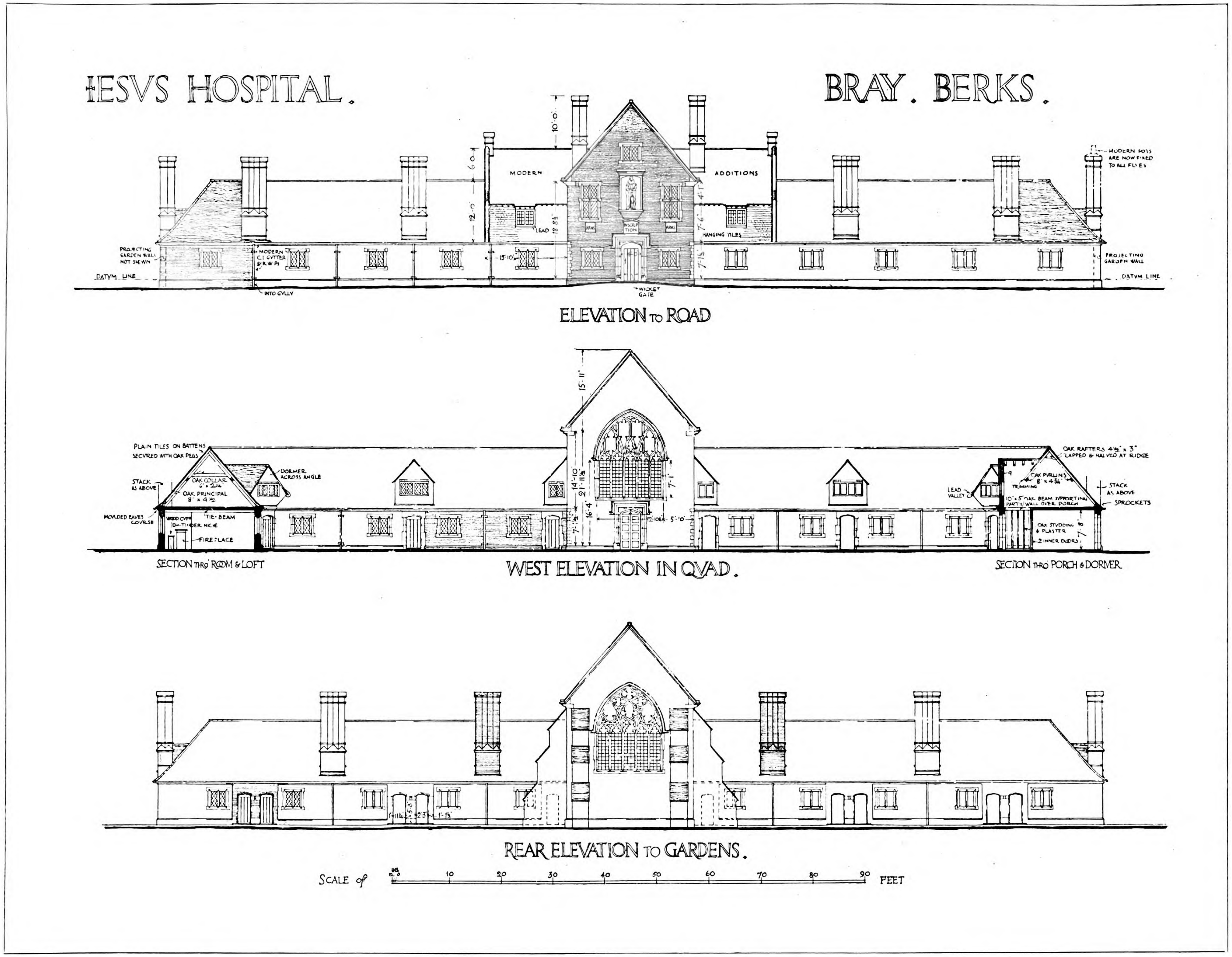
NORTH ELEVATION.

WALLS & CHIMNEYS ARE OF 2" RED BRICK LAID WITH A ¾" MORTAR JOINT. ALL MOULDED BRICKS ARE CVT & ALSO THE SPLAY OF PLINTH. AN OXFORDSHIRE "OOLITE" HAS BEEN VSED FOR ALL STONE DRESSINGS.

THE S. & W. EXTERNAL ELEVATIONS HAVE A VARIATION IN THE TREATMENT OF THE DOORWAYS. THE JAMBS AND ARCH ARE FORMED IN CVT SPLAYED BRICKS AND THEY ARE SET IN PANELS FLVSH WITH THE FACE OF PLINTH. IT IS MOST PROBABLE NO GVTTERS ORIGINALLY EXISTED.

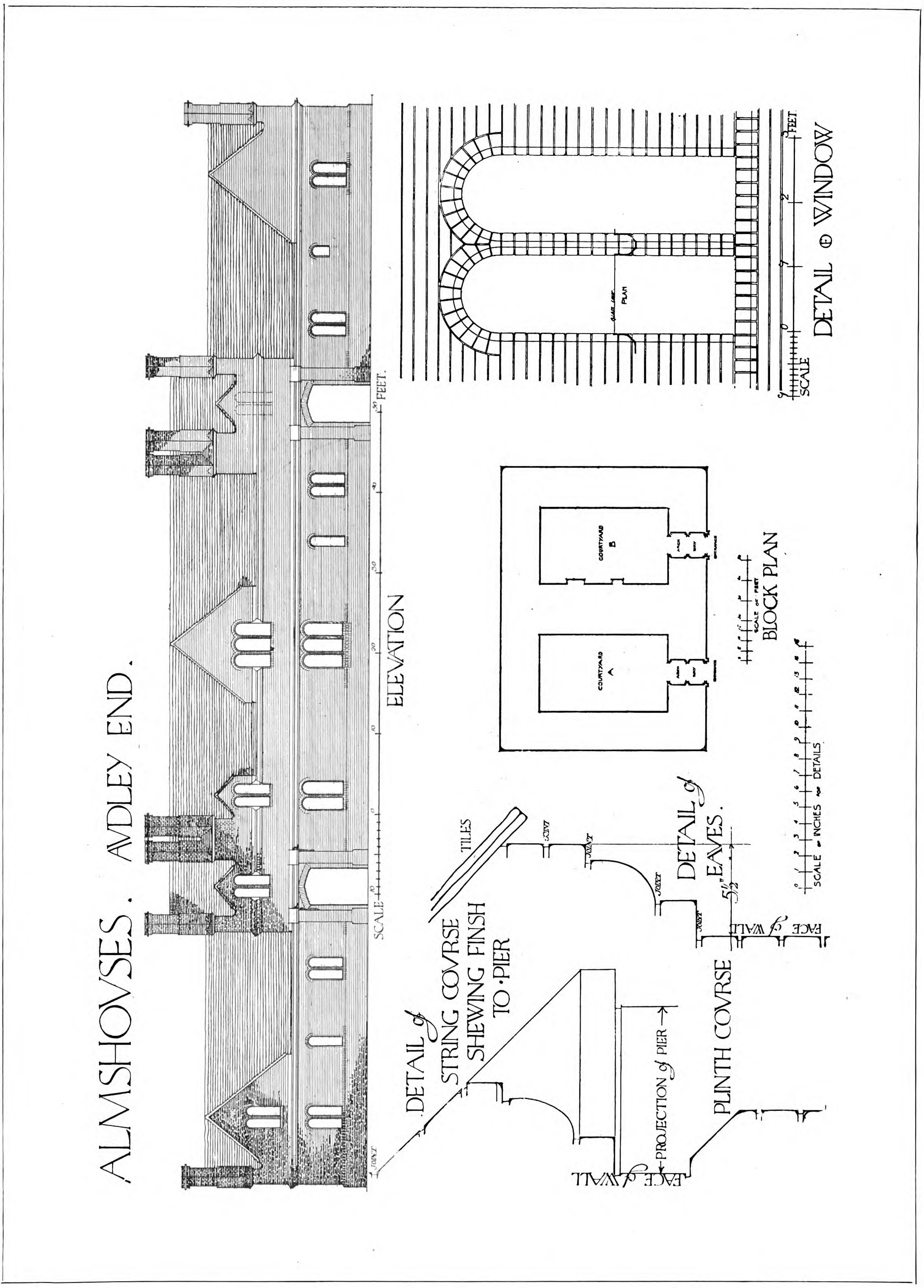
SCALE of 10 9 8 7 6 5 4 3 2 1 0 10 20 30 40 50 60 70 80 FEET

JESUS HOSPITAL, BRAY, BERKS: ELEVATIONS.
Measured and drawn by J. C. Rogers.



JESUS HOSPITAL, BRAY, BERKS: ELEVATIONS.

Measured and drawn by J. C. Rogers.



ALMSHOUSES AT AUDLEY END, ESSEX.
Measured and drawn by H. A. McQueen.

The walling generally is of brown bricks, with red quoins to window openings and at angles of chimney-stacks, etc., the body of the latter, however, being of yellow stock brick. The cornices are of wood and the strings are of stone, like the quoins at angles of the west front. Both stone and woodwork are painted a cream colour, and the effect is quiet and good.

The main entrance is flanked by stone columns carrying a segmental stone hood, and the door is enclosed by a three-centred arch. The keystone is carved with cherubs' heads, and the spandrels have rather poor carving of naturalistic type.

The door itself, of oak, is well moulded, and has a postern for occasional use, a flight of three semicircular steps leading to the entrance. Above, on a cartouche, are the arms in heraldic colouring of Morden and Brand, flanked by swags of fruit and flowers, carved in stone and painted.

In the pediment over are niches, containing figures of Sir John and Dame Susan Morden, "which afford correct instances of the costume of a man and woman of rank at the court of Whitehall." They are in stone, painted, and the former was inserted by Dame Susan after her husband's death in 1708, her own statue having been added by the trustees at her death in 1721.

Jesus Hospital, Bray, Berks.

Walker's picture, "The Harbour of Refuge," was actually inspired by the buildings at Bray, and a star is marked on the accompanying plan (p. 120) showing the approximate position from which the picture was painted. Certain liberties have been taken by the artist in his delineation of the enclosed garth; the pump with its sheltering box edges has been left out, and a statue has been put in its place; the whole is made more formal, to give breadth to the picture; but the old worn red brick, touched by the setting sun, is painted with fidelity.

Jesus Hospital (or almshouse) was founded in the year 1627 by William Goddard. Lysons's "Magna Britannia" gives the further information that it was "for forty poor persons, six of whom must be free of the Fishmongers Company: these have an allowance of twelve shillings a week if married, seven if single.

"The remainder of the pensioners must be persons fifty years of age, who have been householders in the parish of Bray for twenty years: their allowance, two shillings a week. They have all wood and coals, and a gown or coat every year."

The buildings are disposed around a large quadrangle. In the middle of the front, facing the east, the entrance to the "quad" is placed. To give some importance to this feature the building is much higher at this part; indeed, it is almost as tall as the chapel, which is built on the axis of the entrance.

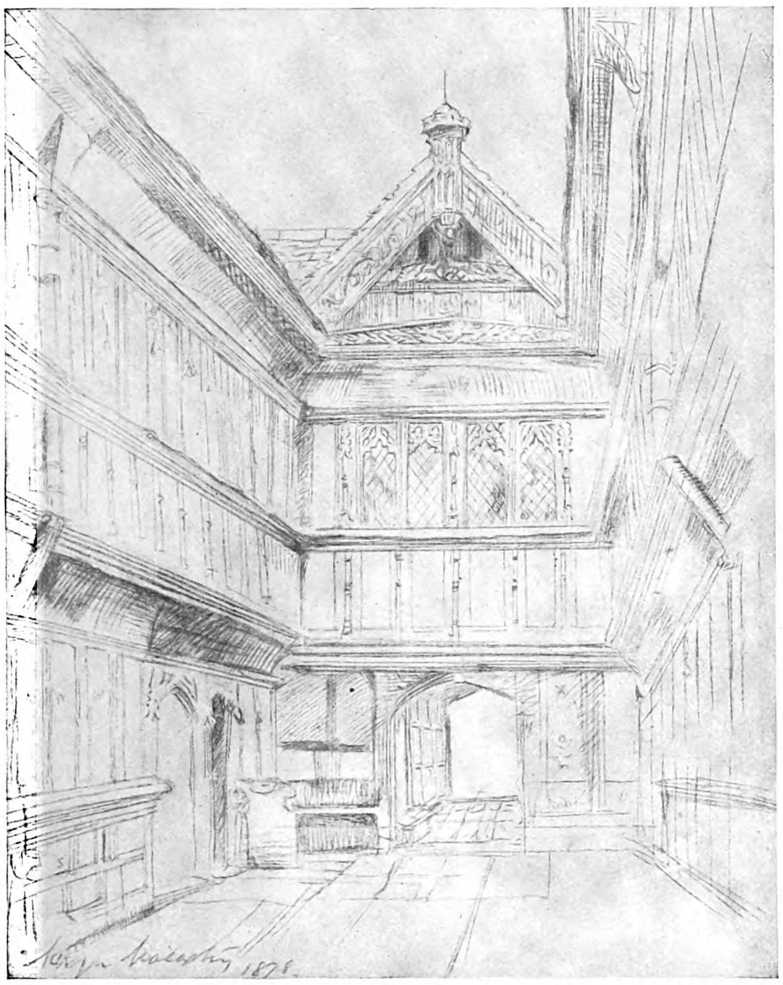
A niche is arranged over the door, containing a statue of the donor which is endowed with a curious comeliness of quiet beauty.

The arrangement of the rooms (only one room deep, and with windows front and back) is such as to allow the sun to touch every one.

The fireplaces are large compared with the size of the chambers: little cupboards for the "wood and coal" are placed at the sides.

Besides adding materially to the comfort of the inmates, these substantial corners are capable of carrying the fine

ALMSHOUSES AT AUDLEY END, ESSEX.



FORD'S HOSPITAL, COVENTRY: VIEW IN COURTYARD.
From the Sketch by Mervyn E. Macartney, F.R.I.B.A.

chimney-stacks which give so much character to the roofs. No feature is more English than this, and none susceptible of more various treatment. It is curious how little is made of it to-day, when no part of architecture is so starved and feeble. In these almshouses the stacks are arranged (always on the outer slope of the roof) in groups of two placed diagonally on a kind of plinth. They are all built of small bricks without ornaments beyond those trifling ones affected by the bricklayer—oversailing courses and steeply sloped weatherings; but the effect is charming. The slope of the roof to the quad has dormer windows in it to light the lofts, and it also serves to light the porches.

It will be noticed that one door from the quadrangle goes into two rooms by means of a small porch, into which the party-wall butts. The party walls, for greater security against fire, are taken over this porch, carried on an oak beam, and go into the centre mullions of the dormers.

Stonework has been used sparingly—for the facing of doorways and windows, and the copestones to the gables.

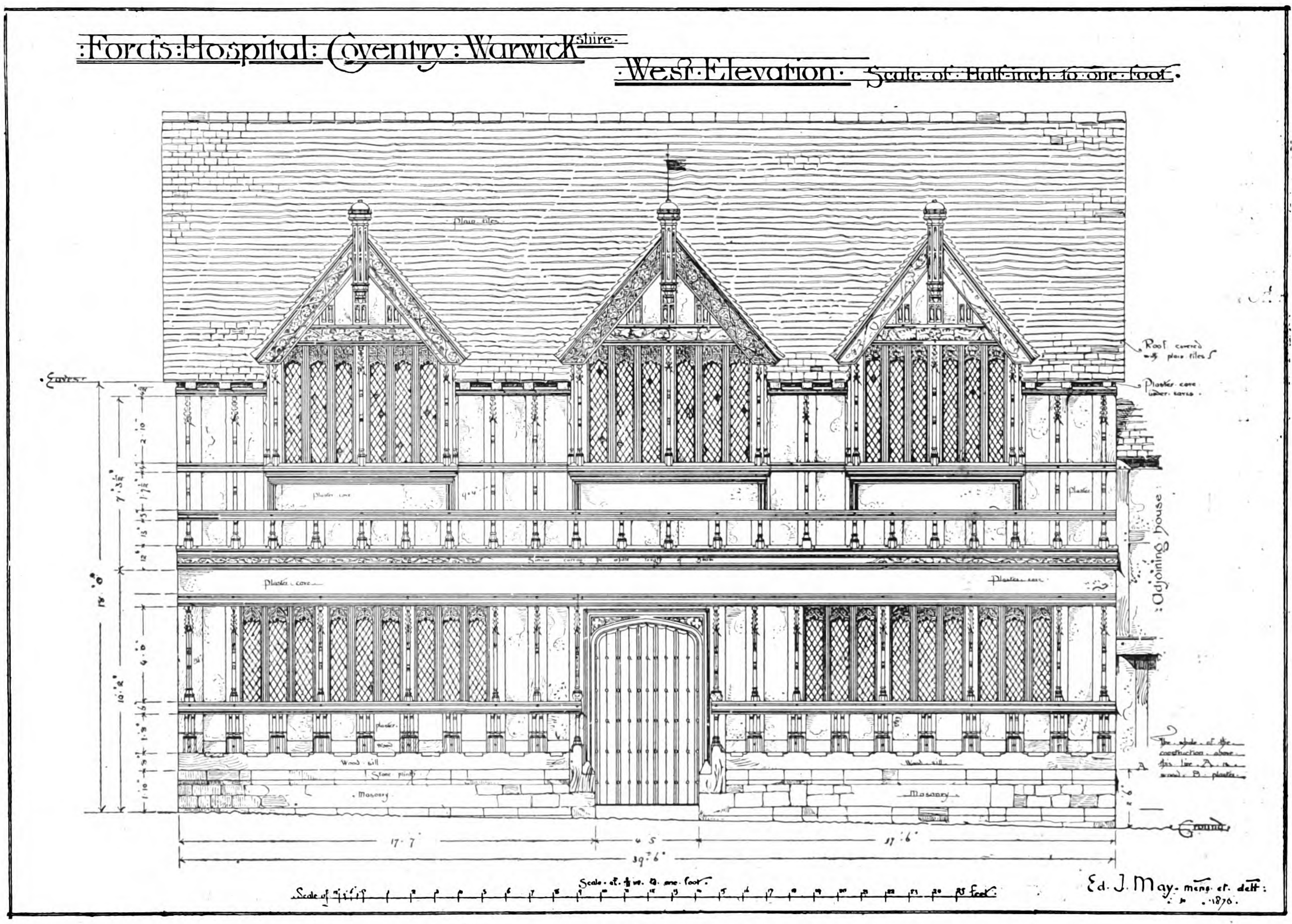
ALMSHOUSES, AUDLEY END.

The almshouses at Audley End offer a good example of quiet and appropriate brickwork design. The houses are built around courtyards, which are entered by arched gateways. The brickwork of the stables at Audley End House is a charming example of similar work—a type that, unfortunately, is badly neglected at the present time.

FORD'S HOSPITAL, COVENTRY.

Ford's Hospital, situated in Grey Friars Lane, Coventry, is an excellent example of fifteenth-century wood-and-plaster work.

(*To be continued.*)

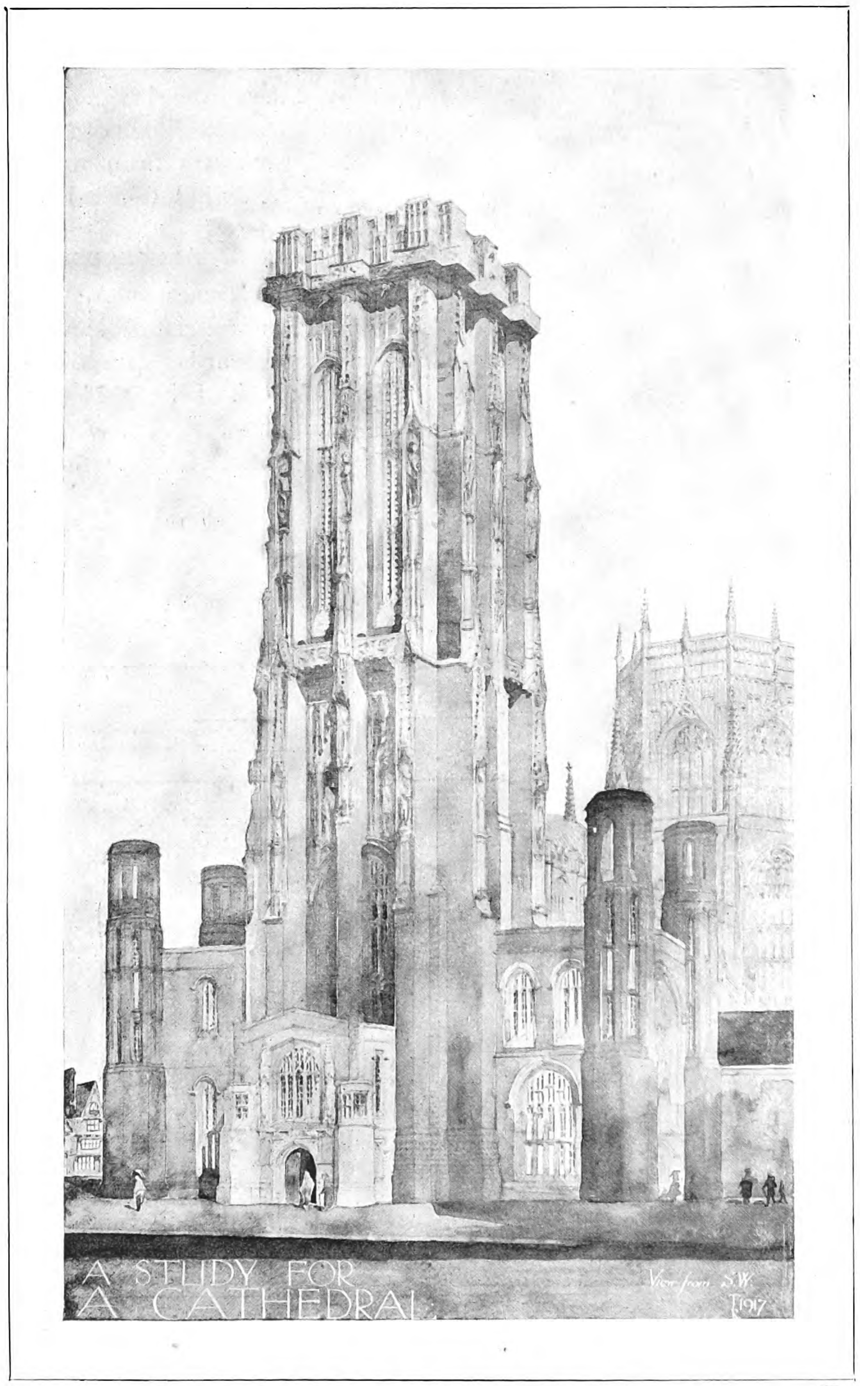

:Ford's:Hospital: Coventry: Warwickshire
·West·Elevation· Scale·of·Half-inch·to·one·foot·
Eaves
Roof covered with plain tiles
Plaster cove under eaves
Adjoining House
Plaster
Wood sill
Stone plinth
Masonry
Ground
17'7"
4'5"
17'6"
39'6"
Scale of one foot
Ed. J. May. mens. et. delt: 1870.

FORD'S HOSPITAL, COVENTRY: WEST ELEVATION.
Measured and drawn by E. J. May, F.R.I.B.A.

A STUDY IN CATHEDRAL DESIGN.

By THOMAS RAYSON, A.R.I.B.A.

THIS design has been evolved from a study of various mediæval buildings in England and France, and it originated in a desire to produce a tower after that of St. Rombaut, at Malines. In order to do this, and to make the tower an integral part of a complete structure, Ely was taken as a general type, so that the tower could have a position at the west, where its lines would rise from the ground.



VIEW FROM THE SOUTH-WEST.

The dimensions of the cathedral may be compared with those of existing cathedrals, among which it would range with the smallest. The span of the nave is 28 ft., as Lichfield and Norwich (Ely is 39 ft.), while the height, 65 ft., is higher than Lichfield, 57 ft., and lower than Norwich, 83 ft. The length, 380 ft., is about the same as Exeter, Chester, and Chichester; though most, such as Winchester, Ely, Canterbury, Norwich (with Lady Chapel), are about 500 ft., or more.

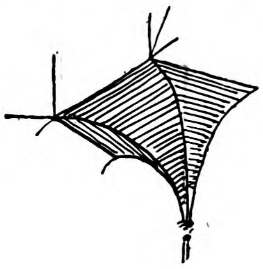
The proportions of the tower approximate those of Malines, the contour of whose buttresses, which gives the delightful outline, has been studied, and a similar effect attempted with English detail. A very important factor is the manner in which the wall face recedes and heavy shadows are produced. The treatment of the upper stages, though suggested by Malines, uncompleted as it is, has been worked out in the character of the fine Somerset towers, more especially Batcombe, St. Cuthbert's, Wells Cathedral, Evercreech, and Bishop's Lydeard.

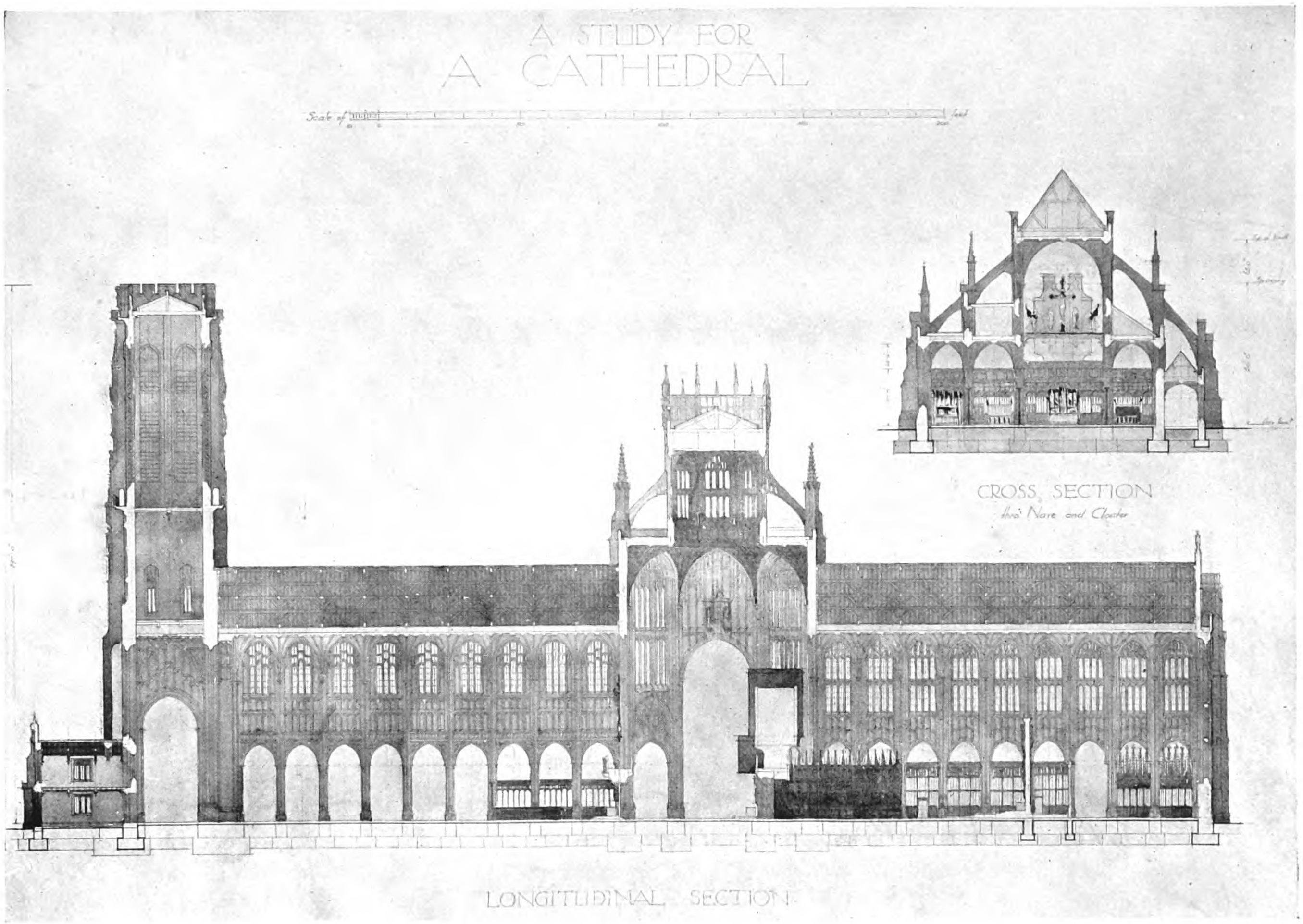
At the base of the tower is a porch, which in the perspective resembles Hereford north porch; but, on further consideration, this was given up in favour of that at Peterborough. Low western transepts support the tower, as at Ely, with corner turrets.

The exceedingly rich effect of three walls rising one behind the other as the distance from the eye lengthens, can be seen in St. Mary's Church, Oxford, and is produced by the south aisle, clerestory, and tower. This suggested the adoption of a double aisle on the north side of the nave. By lighting the triforium as at Westminster, and instead of heightening the aisle wall for the purpose as the builders did there, by moving out the aisle wall one bay and constructing the triforium wall on arches, a continuous edition of the rich Oxford University Church effect is attained. Two bays of this elevation have been drawn. Lighted triforia are fairly common, for Ely, Durham, and Chichester have them; they are found also in France — Coutances, Reims, Chalons-sur-Marne, Amiens, etc.

The internal treatment of the nave is an effort to combine the elegant proportions of the inadequately lighted Canterbury nave with the fine clerestory at Winchester. The vaulting is of the quadripartite form, and covered with a steep cast-lead roof as at Ely.

The main transepts are of the same span as nave and choir, i.e. 28 ft., and the plan of the crossing is nearly an octagon. At Ely, the sides taking the arms of the building are much larger than the others which are pierced with windows. The windows have been enlarged and raised in this design, making the crossing considerably higher than the adjoining vaulting. In this particular the type of a Renaissance Cathedral is suggested. Now, at Ely, the wooden lead-covered octagon is placed so that the angles are opposite the sides below. This necessitates but three sides to the vaulting, thus :—





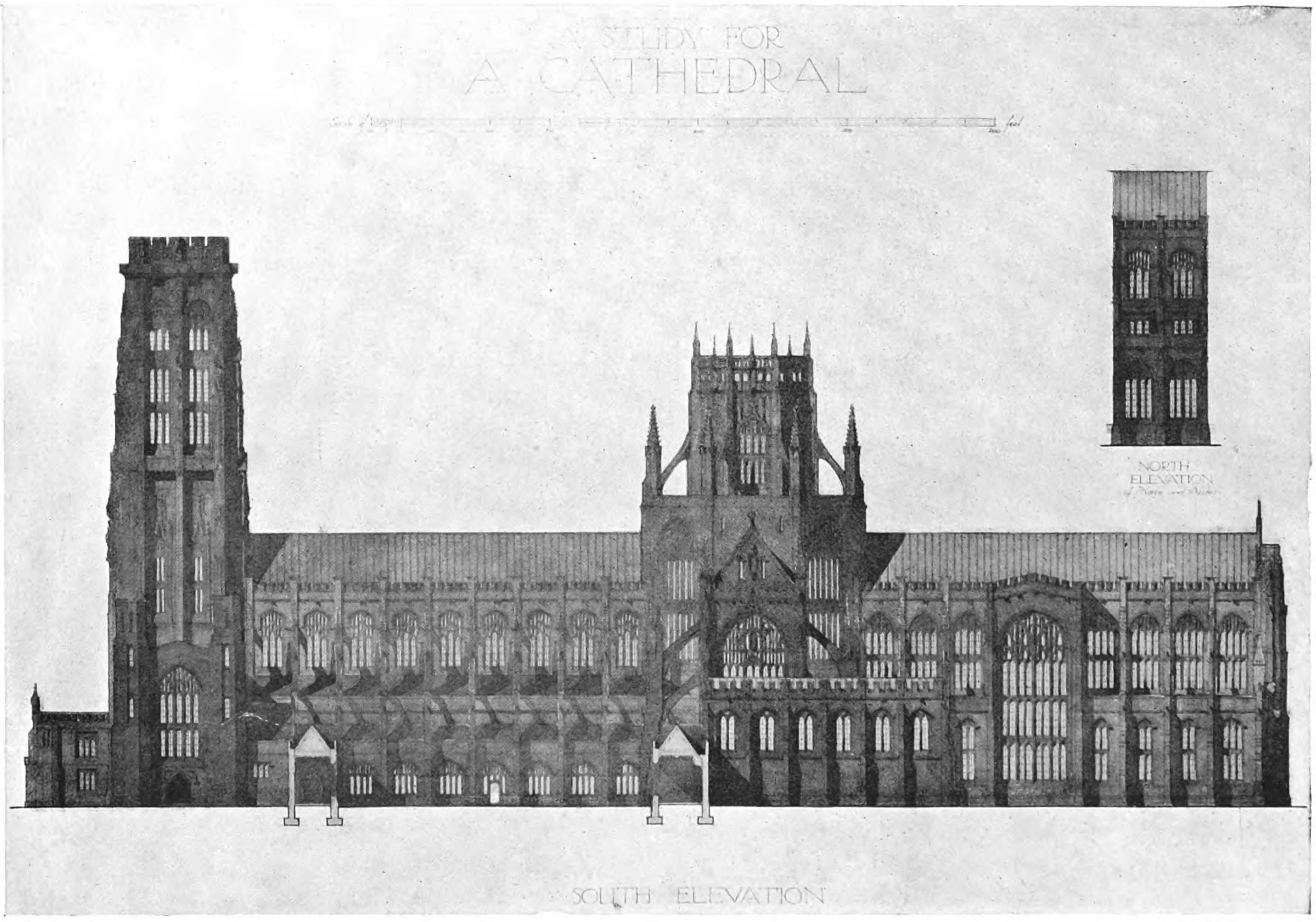
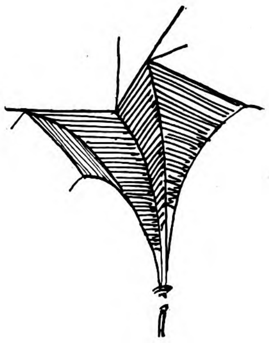


Plate IV. December 1917.

A STUDY IN CATHEDRAL DESIGN: LONGITUDINAL SECTION AND SOUTH ELEVATION.

By Thomas Rayson, A.R.I.B.A.

whereas by placing the octagons parallel the vaulting becomes thus:—



This vaulting and all that covers the crossing are of wood.

The triforium has been omitted in the choir, and the design is based on the Malvern choir. As at Winchester and St. Albans, an elaborate stone reredos enables the high altar to be kept free of the east end, which, as at Durham, York, and Lincoln, is square, and is provided with chapels. As at York, an eastern transept rises from the south choir aisle and lights the high altar and reredos.

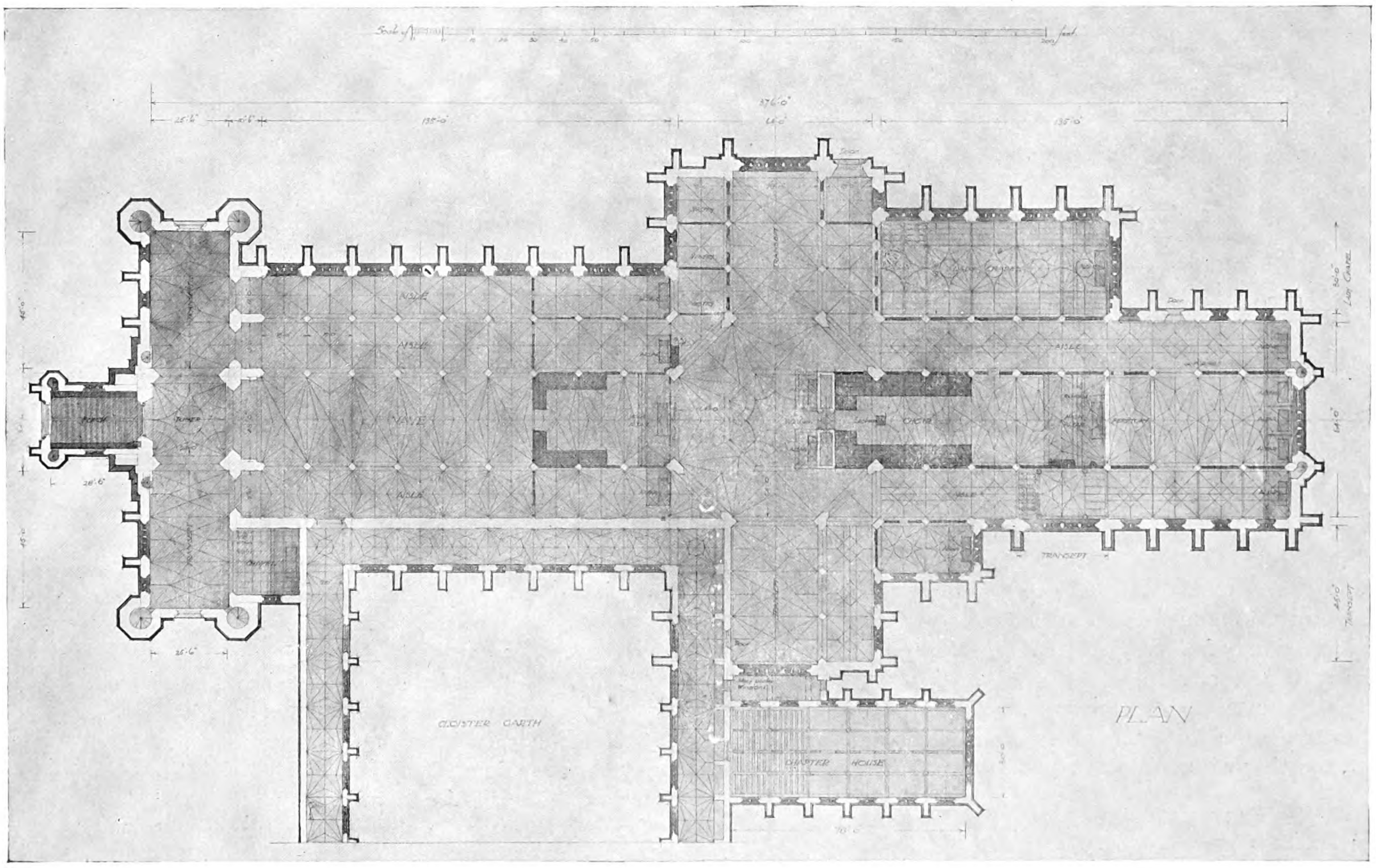
The Lady Chapel is situated in a position north of the choir, as at Ely, but is attached to the aisle and divided from it only by a stone screen.

Instead of the orthodox octagonal Chapter House, precedent found at Bristol and Oxford has been employed, and a rectangular form adopted. This and the west porch, which has a large parvise, are roofed in timber. Vaulting is used everywhere else.

The vaulting of the nave and aisles is of the quadripartite form. The sexapartite form has been suggested for the transepts. The main transept vaulting is based on that of Tewkesbury nave and Gloucester choir, and that in the choir, which would be very ornate, was worked out from the vaulting of Norwich nave and Ely choir. The Lady Chapel would have a specially individual vault, the principles proposed for its construction being those of the Oxford Divinity School vault and of the choir at St. Frideswide's, but fan-vaulting would be substituted for the lierne form.

The fittings have been arranged in the manner typical of the fifteenth-century monastic churches. A wood screen divides the clergy from the laity, and, west of the crossing, the rood screen, with loft, extends across the full width of the church. Altars are here provided, and elaborately coloured reredoses and super-reredoses have been suggested for the lay altar and that in the north wall aisle. The rood beam with figures, and the whole of this screen and loft, would be coloured after the manner of Attleborough, Bramfield, Ranworth, etc. The pulpitum carrying the organ is placed under the crossing, into which the choir partly extends. The canopies to the stalls are indicated after the types at Ripon, Manchester, and Beverley, which have a niche to the upper stage. The pinnacles, however, would here be much exaggerated. Stone screens are shown in this part of the cathedral.

Although the sources of suggestion are mediæval buildings of widely different locality, this cathedral would religiously maintain the local traditions and character of the district in which it were erected.



A STUDY IN CATHEDRAL DESIGN: PLAN.

By Thomas Rayson, A.R.I.B.A.

THE PROTECTION AND PRESERVATION OF ANCIENT BUILDINGS.

IN spite of the restrictions which the War has imposed upon the work of the Society for the Protection of Ancient Buildings, the Committee has contrived to make its fortieth annual report, just issued, a document of considerable architectural interest. The record of work accomplished is necessarily of small proportions. Works of "restoration," it is recalled in the introduction, have been everywhere postponed; and even where action has been necessary for the preservation of an ancient building, only the most urgent repairs have been possible. Physical inactivity, however, has acted, if at all, as a mental stimulus; and the Society has more than maintained its customary vigilance in the defence of threatened buildings. In all, seventy-eight buildings received the attention of the Society during the year ended 1 June 1917. Many famous structures are included in the list; and we may feel satisfied that no effort will be spared to ensure their preservation.

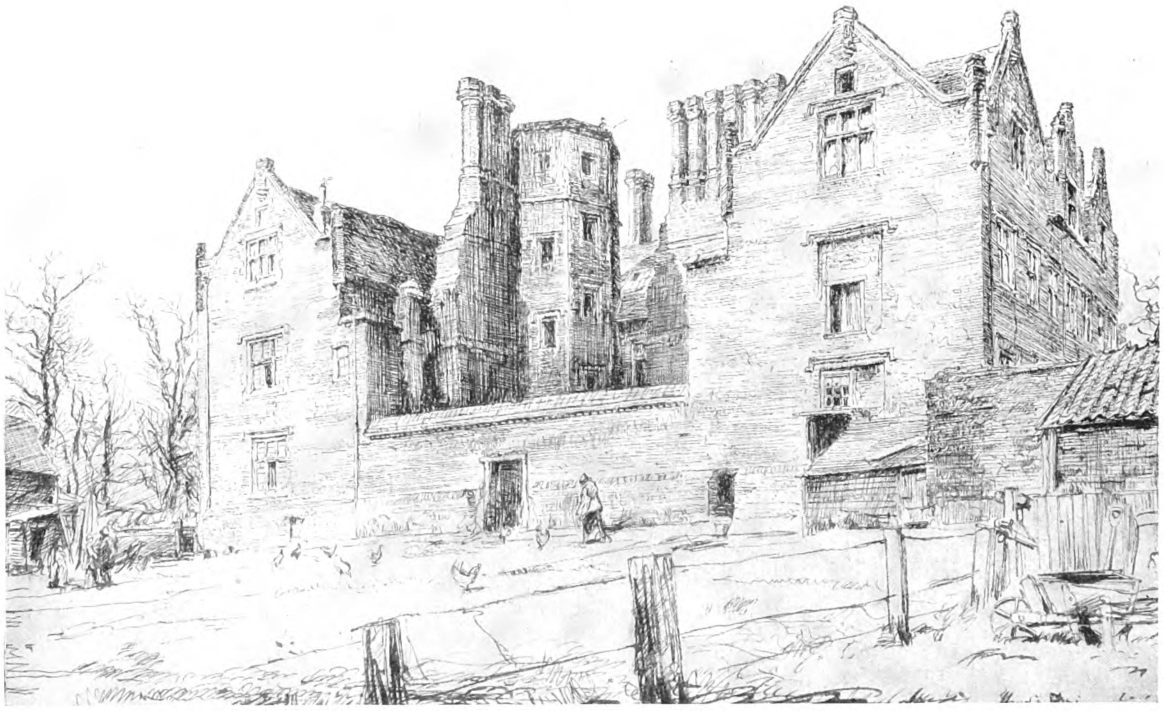
By the courtesy of the Society we are able to reproduce a selection from the admirable illustrations which accompany the report, together with a few words of description and comment.

EASTBURY HALL, BARKING, ESSEX.

The manor of Eastbury formerly belonged to the Benedictine Abbey of Barking; in 1557 it passed into the hands of private owners, and from 1734 the glory of the manor-house has steadily declined, until to-day it has fallen into disuse with the exception of the western wing, which is tenanted by a farmer.

The building is a unique architectural specimen of the middle period of the sixteenth century; the ground plan roughly corresponds with the "H" type. The beauty of its outline, rich in octagonal pinnacles and fine chimneys, forms a striking contrast with its surroundings. The fabric is sound: the red brick of which it is built has withstood the ravages of time and has weathered remarkably well; indeed, externally it looks very much as it did in the early years of Queen Elizabeth's reign. The interior has been mostly stripped of its fittings years ago, and presents a sad picture of neglect. Horses and poultry are housed in the parlours and the dining-room, which in bygone days were resplendent with decorated ceilings and stone fireplaces, painted frescoes and tapestries.

The existence of this building has been insecure for two centuries or more, but its threatened demolition has never been more real than it is at the present moment. Its degradation may be consummated and it may be handed over to the house-breaker. The timber it still contains may seal its doom unless effectual measures are taken to ensure its preservation. The Society has made urgent representations to the borough council, but without Parliamentary sanction it is impossible to protect the building for all time unless some individual or body of persons would purchase it with that intent. The sugges-



EASTBURY HALL, BARKING, ESSEX.

From a Drawing by Hanslip Fletcher.

Reproduced by courtesy of the Society for the Protection of Ancient Buildings.

tion has been made that it should be converted into a home for disabled soldiers, for which it is eminently fitted; and surely this late Tudor manor-house would have a particular charm for those men who have fought and suffered for their country.

Abbot's Barn, Pilton, Somerset.

This old barn formerly belonged to the Abbots of Glastonbury, whose summer palace—now called the Manor House—is close by.

The interior exhibits an interesting construction of oak, and the roof is covered partly with thatch and partly with stone tiles. The thatch had fallen into such bad repair that the owner contemplated replacing it with blue slates, which would have robbed the building of one of its most characteristic features. Fortunately, local feeling was aroused, and owing to the energy and public spirit of a resident the building was at the eleventh hour rescued from this fate. Although the slates were already on the site, arrangements were made for reed to be substituted; and in spite of the severe winter, as well as the War, a competent thatcher has made steady progress with the work, which is now nearing completion.

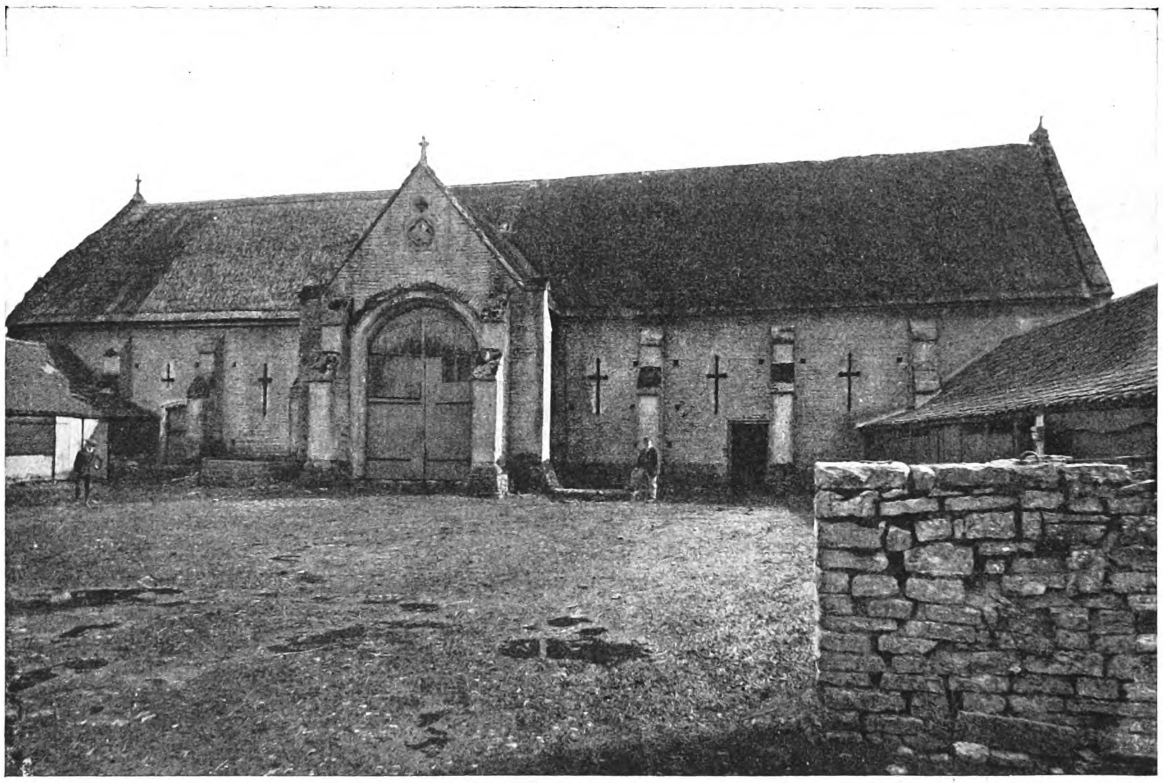


Photo: Messrs. J. H. Day and Sons.

TITHE BARN, PILTON, SOMERSET.

Reproduced by courtesy of the Society for the Protection of Ancient Buildings.

As the result of this careful treatment, this valuable and venerable building has been preserved without loss of interest, and will remain one of the treasures of the county for many years.

No. 1 St. Peter Street, St. Albans, Herts.

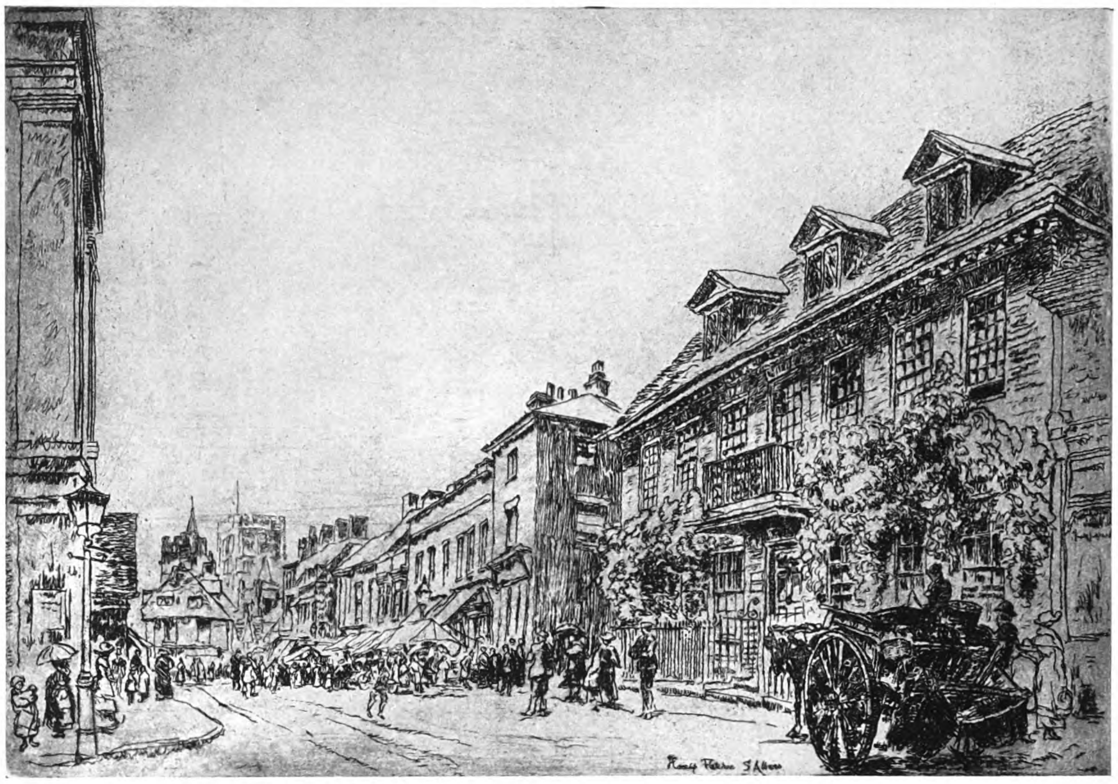
Mr. Thackeray Turner's letter to "The Times" has recently drawn attention to the house No. 1 St. Peter Street, called The Mansion, which is among the finest survivals of sixteenth-century architecture in the city. For three hundred years this house has been associated with civic affairs, and it is satisfactory to be able to read that the citizens of St. Albans have awakened to its interest, and that already a movement is on foot to preserve it.

Judging from old maps and other data, the building was erected late in the sixteenth century; it underwent considerable alteration in the reign of Charles II; the brick front of seven bays, two storeys high, replaced the overhanging timber front, and the hall, which formed the principal apartment, was divided in two. Fortunately the new work was inserted without displacing existing features. The original fireplace with its Tudor Rose decoration was left standing, and the moulded oak beams with the trellis panelling in the ceiling remained in situ. Reference to the accompanying plan will make this clear. The alterations of the seventeenth century included the adaptation of the existing roof timbers and the insertion of three dormer windows, two with straight-sided pediments, the centre one having a segmental pediment, which was taken down and replaced by a straight-sided one thirty years ago.

All the work is in good preservation, and if the projected act of vandalism can be stopped and the panelling saved for the city the building might well become a public museum. A small committee is to be formed locally to discuss a proposition on these lines, and, if necessary, to invite subscriptions.

At any time, the destruction of houses of historical interest is deplorable; but in these days of national stress, and with the example before us of spoliation in the areas devastated by war, these heirlooms of the past within our doors must be guarded with zealous care.

Readers of The Architectural Review will remember Mr. Hanslip Fletcher's large pen-and-ink drawing of this interesting old house which formed the frontispiece to the August issue.



NO. 1 ST. PETER STREET, ST. ALBANS, HERTS.

From an Etching by Hanslip Fletcher.

Reproduced by courtesy of the Society for the Protection of Ancient Buildings.

As the introduction to the Society's report contains matter of considerable topical interest, we quote it somewhat freely:—

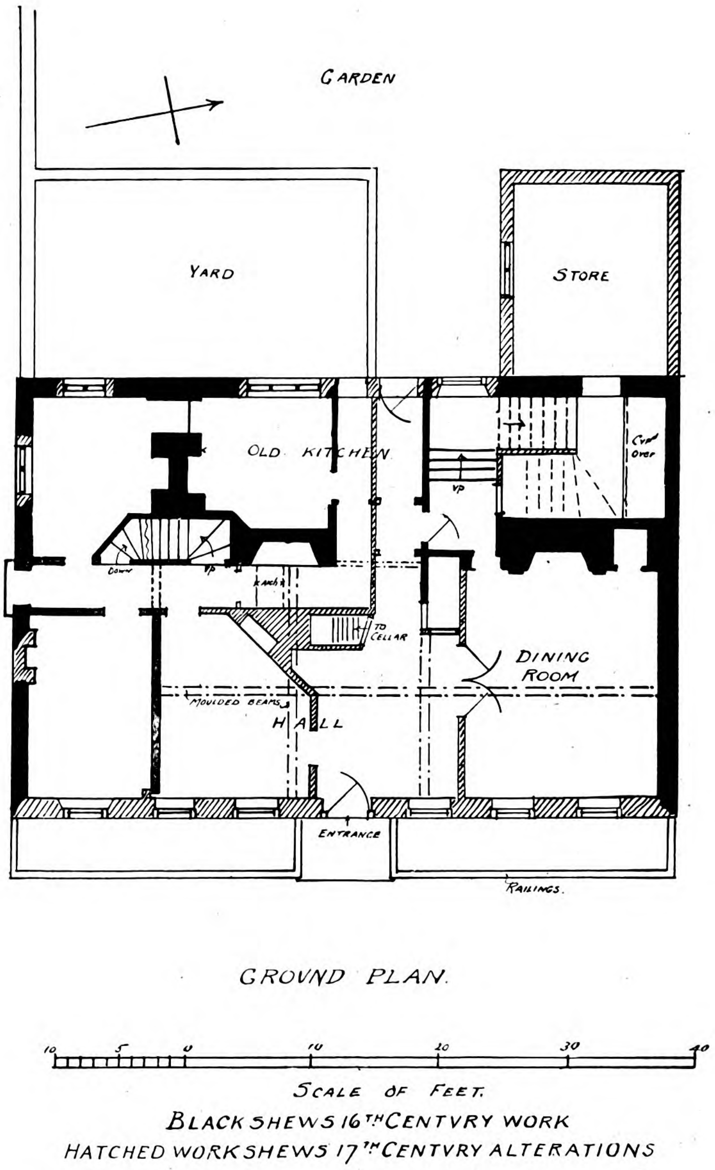
"The introduction to the previous issue," it is stated, "drew attention to the risk of disfiguring ancient buildings and their amenities, and more especially churches, by the erection of unsuitable memorials. It is too often the case that such memorials, though unobjectionable and even praiseworthy in themselves, have been designed without any consideration of the building in which they are to be placed. It is evident that such a warning needs restatement, for the past year has revealed yet another danger.

"There is a growing desire for adding war memorial chapels or other structures to cathedrals and churches. These projects are intended to commemorate the sacrifices made by the country, town, and village, and are often promoted with the additional object of enlarging the edifice concerned. Schemes of this nature almost invariably involve the alteration or destruction of some ancient workmanship, a procedure to be deplored when, as frequently happens, the extension has little reference to the real needs of the church.

"A typical instance is the proposal to restore the missing Norman chapel at the east end of Norwich Cathedral which was removed in the thirteenth century to give place to a new Lady Chapel. This later structure in turn was demolished in the sixteenth century, and the site has remained practically vacant since that time. It is doubtful if in ordinary times such a building as is now proposed would be seriously contemplated. The idea of replacing the earlier missing chapel, the foundations of which are known to exist, as a War memorial, however, encourages the authorities to proceed, and the site, shape, and character having been chosen, instructions are given to a qualified architect to plan a Norman chapel.

"The plan at present favoured by the Dean and Chapter, while confusing the structural story of the cathedral, appears unsuited to its dual purpose. It will not adapt itself to any purpose of worship other than what is already provided, nor will it at the same time lend itself to the best means of commemorating the names of Norfolk men and the deeds which they have rendered in the great struggle.

"Other less important cases could be given where a more general acceptance of the proposals would have been secured had competent advice been taken in the initial stages. The ancient ecclesiastical buildings of this country are a national possession protected by ecclesiastical law from risk of defacement, destruction, or undesirable decoration, and are placed in the hands of incumbents or other temporary authority to be cared for. The purpose of a faculty is not always understood or observed by these responsible guardians, and it is often found that changes are effected to the detriment of these priceless buildings when, by the ordinary operation of the law, all risk of injury would have been avoided. It is seemly that the church should not display signs of internal troubles, but in the matter of its great places of worship a strict observance of ecclesiastical law and authoritative custom should be upheld."



Reproduced by courtesy of the Society for the Protection of Ancient Buildings.

"THE WORKING-CLASS HOUSING PROBLEM AND ITS SOLUTION."

To the Editor of THE ARCHITECTURAL REVIEW.

SIR,

The very interesting article by Mr. Mervyn Macartney gives rise to so many ideas that it is not easy to express them in a reasonable space. If the notes which follow appear to criticize some of the points mentioned in the article, it is because it is convenient to deal with them as they appear.

The difficulties with which most of us have to contend are found in urban, or rather suburban, housing, and the only plan illustrated which can be considered as belonging to this type is the standard plan on page 79. The others come under the head of rural cottages, or are designed for special positions. Reference is made to the appalling streets of some of the suburbs of London and other large cities. It is this state of things which needs alteration, but how is it to be done?

Mr. Macartney does not discuss sites; but is not this the crux of the whole matter? Assuming that cottage plans are limited to several types—and it is reasonable to suppose that the limit of the number of combinations of three bedrooms on the upper floor and of living-room and scullery on the lower floor is soon reached—the architect is in a very helpless position if the plots have not been considered with a due regard to the grouping of the houses in a convenient and pleasing manner. Surely this is essentially a matter for an architect. Unfortunately, however, he has often no opportunity of doing this. In many estates the frontages are practically fixed so as to obtain as many ground rents as possible, and this, together with the great cost of street and sewer making, renders it almost hopeless to depart from the stereotyped plan. The frontages must be kept as small as possible.

In this city it has been usual to divide the estates into plots of 56 ft. frontage for four houses, with one through passage leading to a common yard. This gives rooms just over 12 ft. between the dividing walls, and, of course, the front door opens directly into the front room. It is hardly ever used, by the way, except for bearing the number of the house. The stairs are placed between the front and the back rooms, and a scullery may or may not project as a back addition. The through passage is 3 ft. 6 in. wide, and the bedrooms extend over it. The terraces are continued without a break until the cross streets are reached. The general effect of miles of these streets is as depressing as can well be imagined.

The standard plan illustrated in the article is, with very slight variations, the one evolved by many architects, and has as small a frontage as is possible in a good plan. It is noticeable, however, that the conveniences are not included in the main building, and these are never sightly in separate blocks. But even this plan, although the actual cost of the buildings may not exceed that with an inferior plan, is almost impracticable as a remunerative investment under ordinary circumstances—for the following reasons. Assuming there are twenty cottages in five blocks of four each, with 6 ft. between the blocks, the frontage would work out as follows :—

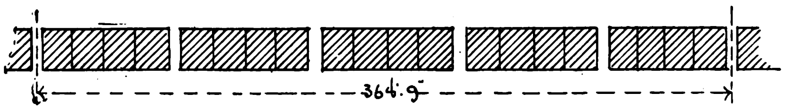


FIG. 1.

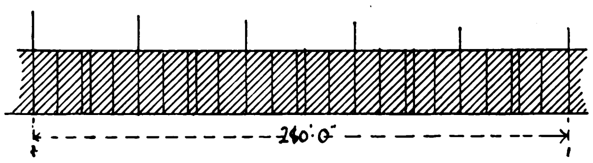


FIG. 2

(See FIG. 1.)

	Ft.	in.
Four houses at 16 ft. between walls	64	0
Five walls at 9 in.	3	9
Each block ...	67	9
67 ft. 9 in. by 5	338	9
Four spaces at 6 ft.	24	0
Two half-spaces at 3 ft.	6	0
Total ...	368	9

On the other hand twenty cottages in one terrace with one through passage to each would give this result :—

(See FIG. 2.)

	Ft.	in.
Four houses at 12 ft. 2¼ in. between walls ...	48	9
Four walls and two half-walls	3	9
One passage	3	6
Each block	56	0
Five blocks at 56 ft.	280	0

As the cost of street dedication and ground rent would be one third more in the former than in the latter case, it is easy to see why such a plan, however good, does not find favour with those building for an investment, let alone with speculating builders.

The idea of using local materials is a very good one in the country, but it is hardly practicable in towns. In the innumerable working-class streets of our cities it is not possible to consider the general use of stone. In this city of steep gradients and costly carting, stone is largely used in the immediate proximity of the quarries which exist on one side; but on the sides where there are no quarries stone is not used. In the stone suburbs it is used only for fronts, brick being used for the backs. For foundation walls rubble stone is cheaper than brick, and is used freely. To mix stone and brick externally is a shabby way of dealing with the problem, and is entirely destructive of any sentiment in favour of buildings appearing to "grow out of the soil." Besides, at any time a brickyard may be started close to the quarries, and what has been a stone district becomes a brick one. Stone is wasteful of space; there will probably be many open joints in the interior of the wall, and the mortar is likely to drop out. Rough stone, too, catches the dirt and smoke more than smooth brick.

Of course, for buildings of other kinds nothing is more delightful than stone, but it is hardly suitable for street after street of cottages in a smoky atmosphere. Some of the West Riding towns—where stone is actually cheaper than brick, and is in consequence used almost exclusively—equal in ugliness any that can be seen in brick districts.

Mr. Macartney disclaims any intention of showing "pretty" houses, but there is not one in his article that is not attractive in every way—far more so than the fussy erections with which we are familiar.

It is doubtful whether a single coat of plaster can ever be satisfactory. Walls are usually so uneven that quite an inch of plaster is necessary in places to obtain a flat surface. With rubble stone it is often nearly two inches thick in places. To use a plaster which would give an even surface in one thick coat would be more expensive than to use a coat of rough mortar with a setting coat which would take paper or distemper.

If the problem of suburban housing is difficult, what can be said of the districts between the business centre of the city and the suburbs? These are the districts in which are found the "condemned areas" occupied by the most miserable section of the population, and these are the despair of the housing reformer. In Continental cities, as in the West End of London, these intermediate districts are often the most attractive. They are occupied by the wealthiest of the inhabitants who do not wish to get as far away as they can from the centre, as is the case in our provincial cities. In removing slum property it is obvious that the two-storied suburban cottage cannot be erected in these districts. It is better to deal with this problem more on the lines of the Westminster housing scheme by providing flats with good open spaces, and playing-greens with fountains and ornamental gardens and courts. These are much more interesting than streets of two-storied cottages, and if provided in our provincial cities should attract a large class of the population who wish to be near the centre.

Possibly these notes emphasize the difficulties rather than suggest a solution of the housing problem. Is not the question in the main an economic one?

H. L. PATERSON, A.R.I.B.A.

Cairns Chambers,
19 St. James's Street,
Sheffield.

To the Editor of THE ARCHITECTURAL REVIEW.

SIR,

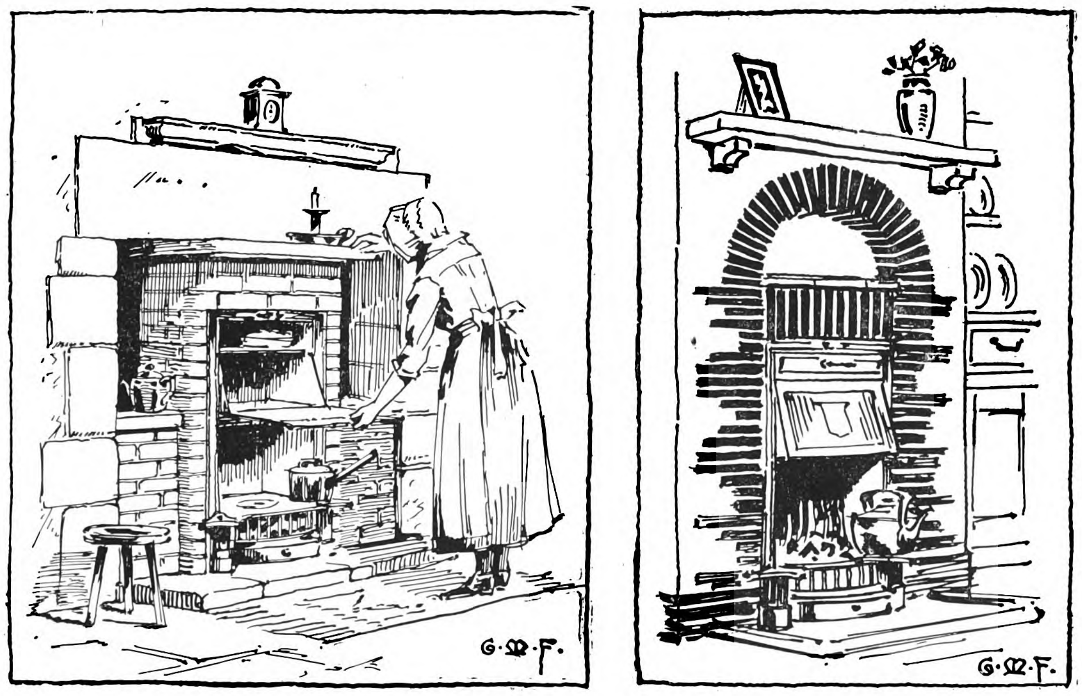
I was pleased to see in your October number that you are opening your columns to what one might call a conference in print on the above important subject. I was much interested in Mr. Macartney's remarks as to the living-room stove, for I also must confess to be a worshipper of the British open fire. I have been the means in several cases of having fixed a stove which meets the case, and I enclose two small sketches which will explain to a certain extent the working of it. In the one case, I fixed it in an old cottage fireplace in the north of Scotland; the other represents new work.

In the former, I admit the old stonework adds to the effect, but it could be equally well placed in the regulation opening, with cement jambs and head. It will be seen that it is not a substitute, but a proper open fire. The oven is over the fire behind what appears to be a blower, and the sloping back when let down forms a hot plate as in a range. The arrangement cooks well, and this I have on the very best authority, namely, the housewives', while the head of the family must certainly be pleased with the open fire in the evenings. In the type of house we are considering, the bath, if there is one (and there certainly ought to be), is generally in the scullery adjoining the living-room. Now, a boiler can be supplied with the stove, so that, by fixing a small tank in the scullery, hot water can be had for the bath, without the trouble of carrying it after it has been heated.

John Stuart Mill has put it that the object of all true practical economy is the greatest amount of happiness for the greatest possible number; and in making the home comfortable we are taking a step towards the realization of this high ideal.

GEO. MCLEAN FORD, F.R.I.B.A.

Bank Chambers,
329 High Holborn, W.C.



THE LIVING-ROOM STOVE.
From Sketches by Geo. McLean Ford, F.R.I.B.A.

MR. MACARTNEY REPLIES.

Replying to correspondents whose letters appeared in our last issue, Mr. Macartney writes:—

"It is impossible for me to go into detail in criticizing the correspondence evoked by my article; but I should like to reply to various objections contained in some of the letters. Mr. Hallam asks why should a tenant pay for an empty space in a roof? Does he mean that flat roofs are more economic than steep roofs? My experience of them is that unless made with care they are very costly to construct; and they are entirely out of keeping with the building tradition of this country, and, in rural districts, with the character of their surroundings.

"The selection of site and placing of the buildings on it is so much a matter of locality that it is impossible to discuss the problem in a short article. There are certain definite rules accepted by all who have studied the subject, such as, place the living-room to get all the sun possible, let the ground fall away from the houses, do not place more than eight dwellings (separate) to the acre, etc.

"I am afraid Mr. Bromley's plan would not appeal to the T.P. and R.H. Council. All back additions are anathema to the modern cottage designer. If Mr. Bromley could plan his scullery annex *dos à dos* on the party wall he would obtain a longer open space between one projection and that of the next house. Mr. Bromley's remarks as to access to back areas of dwellings are borne out by troubles, etc., at Well Hall. There is no nation so tenacious of its insularity as the English. It has taken half a century to bring flats into any sort of favour, and that only with 'people of means.' The labouring and working class do not take to them kindly. They want private access to their houses and gardens, and do not intend to share doors, gates, paths, or staircase with anyone.

"As to Mr. Burgess's carefully thought-out review of my article, I must in the first place thank him for the pains he has taken to form an impartial judgment on the plans, etc. He has studied the problem from the overseas standpoint, which is always interesting but not always practical (a sentence or two back I spoke of the English insularity), and the particular stratum of society that these buildings are planned for dislikes novelties. Baths, hot-water pipes, and sanitary conveniences can only be introduced with great care, as very often the tenant, instead of utilizing them for the purposes they were meant for, destroys them. We must educate people to the idea of these things if they are to be properly used. The cost of upkeep is enormously increased by every additional article that is introduced into the building. A circulating hot-water system would be both costly to install and difficult to keep in order, especially in villages where there is no constant supply of water. Mr. Burgess's suggestion of a cupboard-dresser partition seems to me capable of much utility. But I do not believe in the veranda on the north side of a cottage. It would become the receptacle of all the rubbish that collects in a house, and possibly be turned into a fowl-run or even a pigsty. The warming of rooms by running a flue-pipe through them and using a portable stove is excellent if it can be carried out; but the scheme would be a novelty to most cottagers, and not likely to catch on rapidly. I can fully bear out Mr. Burgess's recommendation of frame houses. I lived nearly a year in such buildings, and found them very comfortable, even with temperature below zero.

"Mr. Keith Young's communication is the one that seems to me most illuminating and practical. I am glad indeed to get the sanction of an expert as to the unnecessary heights insisted on by local authorities in some districts. This is a matter that will certainly be seen into by the Local Government Board. The patent brick I referred to was one made by Colliers, of Reading. It is about 4 in. thick and is stated to be waterproof. I heard good reports of it, and had specified its use just when the War broke out."

R.I.B.A. NATIONAL HOUSING COMPETITION.

THE Local Government Board, being desirous of obtaining designs for cottages suitable for the housing of the working classes, have placed at the disposal of the Royal Institute of British Architects a sum of money for this purpose, and the Institute has therefore decided to invite its Allied Societies to assist in obtaining designs under the following conditions:—

For the purpose of the competition, the country is divided into six areas, comprising the districts of the Allied Societies and the R.I.B.A., as follows:—

I. *Northern Area.*—Northern Architectural Association, Leeds and West Yorkshire Architectural Society, York and East Yorkshire Architectural Society, Sheffield South Yorkshire and District Society of Architects and Surveyors.

II. *Manchester and Liverpool Area.*—Manchester Society of Architects, Liverpool Architectural Society.

III. *Midland Area.*—Birmingham Architectural Association, Nottingham and Derby Architectural Society, Leicester and Leicestershire Society of Architects, Northamptonshire Association of Architects.

IV. *South Wales Area.*—South Wales Institute of Architects.

V. *South-West Area.*—Devon and Exeter Architectural Society, Bristol Society of Architects, Hampshire and Isle of Wight Association of Architects.

VI. *Home Counties Area.*—Royal Institute of British Architects.

CONDITIONS.

VI. Home Counties Area.

1. Pursuant to the scheme above described, the Royal Institute of British Architects invite designs for cottages in accordance with the instructions and particulars stated below. The competition is open to any British subject.

2. The designs are to be suitable for erection in urban and rural districts in the counties of Norfolk, Suffolk, Cambridge, Huntingdon, Middlesex, Essex, Hertfordshire, Bedfordshire, Oxfordshire, Buckinghamshire, Berkshire, Surrey, Sussex, and Kent.

3. The designs are to include four classes or types of cottages as described below, and premiums are offered as follows:—

	1st.	2nd.
Class A	£100	£50
" B	100	50
" C	100	50
" D	50	30

4. The adjudication will be made by a committee of not less than three architects appointed by the Royal Institute of British Architects, and their judgment is to be accepted as final.

5. It is to be understood by competitors that the payment of the premiums conveys the absolute possession of the designs, including all copyright or other rights, and that the promoters will be at liberty to make any use whatever of the designs, and to publish them with the names and addresses of the authors. The promoters reserve the right to exhibit publicly, after the award, all or any of the designs as they may think best, with the names of the authors attached. No architect shall compete in more than one area.

6. Designs are to be prepared strictly in accordance with the instructions below, and any design which does not so conform will be excluded. On this point the Committee of Selection are to be the sole judges.

7. Designs are to be delivered carriage paid to the Secretary, R.I.B.A., 9 Conduit Street, Regent Street, London, W.1, on or before 31 January 1918.

8. The unsuccessful designs will be returned to the authors carriage paid as soon as practicable.

9. Any questions had to be addressed to the Secretary of the Royal Institute of British Architects, 9 Conduit Street, W. 1, on or before 27 November. Replies will be issued to all competitors as early as possible.

10. Each set of designs is to be accompanied by a sealed envelope containing the name and address of the author.

11. No motto or distinguishing mark is to be put on the drawings.

12. Every care will be taken of the drawings, but the promoters will not be responsible for any damage they may sustain, or for their loss.

13. Designs may be submitted in any or all of the classes as follows:—
Class A.—Living-room, scullery, etc., and three bedrooms.
Class B.—Living-room, parlour, scullery, etc., and three bedrooms.
Class C.—Living-room, parlour, scullery, etc., and two bedrooms.
All the above to be treated as two stories.
Class D.—Variations of either A, B, and C planned entirely or mainly on one floor. Larder, fuel store, etc., w.c. or e.c., cupboards, etc., to be included.

14. In all cases back additions are to be avoided or minimized as much as possible.

15. All houses are to be provided with a fixed bath and a cold-water supply. Arrangements for the supply of hot water are to be indicated on the plan.

16. Positions of all principal pieces of furniture, such as dressers, tables, beds, etc., together with opening of doors, the points of the compass, and dimensions of rooms, are to be indicated on the plan.

17. In Classes A, B, and C several houses must be shown as a block of which three are to be planned in detail, the others in outline only. Of these three, one is to be an end or semi-detached house; another a terrace house or one between party walls with narrow frontage (not exceeding 18 ft.), and a third with wide frontage. The depth of the site is left to the discretion of the competitors, and the site may be regarded as level.

18. The general height of rooms is to be not less than 8 ft., the floor area of the principal bedroom to be not less than 160 ft., and no bedroom to be less than 70 ft.

19. The plans may be prepared without regard to any existing by-laws or local Act provisions, the object being to show the best types possible if existing restrictions are removed.

20. Each design is to show plans of each floor, one section indicating the staircase, and two elevations, and to be drawn to a scale of one-eighth of an inch to the foot on half double-elephant sheets. No other drawings to be submitted.

21. All drawings are to be in line only without washes, with the walls blacked in, and are to be sent flat.

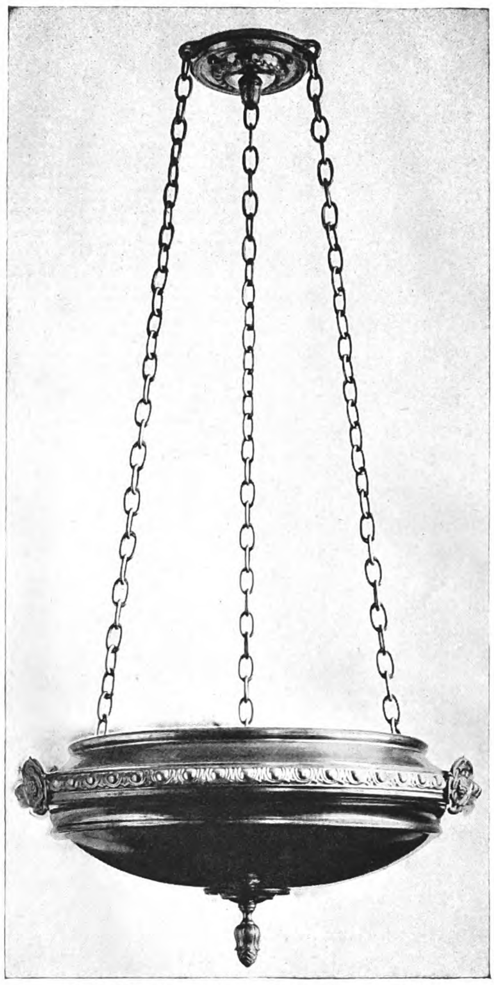
22. The designs in each of the Classes A, B, C, and D are to be on separate sheets. Notes of materials, etc., are to be printed on the drawings, together with the cubic contents of each house measured from one foot below the floor to half-way up the roof. No separate report is necessary.

23. Wherever possible, materials of the locality, if reasonably obtainable, should be specified; but, as there exists at the present time a serious shortage of certain materials, competitors are invited to consider and suggest the substitution of others with a view to facilitating and cheapening construction. It is essential that strict economy be exercised throughout the design, and this will be an important consideration in making the awards.

A MODERN LIGHTING INSTALLATION.

IN the past, architects have not perhaps been fully alive to the high importance of artificial illumination in buildings; but recent years have witnessed a gradual but definite change of policy with regard to this vital department of building equipment. It is certainly no exaggeration to say that artificial lighting is now receiving closer and more careful attention than ever before. A notable instance of modern practice is provided by the new premises for the Crown Agents for the Colonies, illustrated in our last issue (Messrs. John W. Simpson, F.R.I.B.A., and Flight - Lieutenant Maxwell Ayrton, R.N., A.R.I.B.A., architects).

These buildings were partly completed before the War, and the lighting arrangements were very carefully considered before the equipment was selected. An extensive series of tests, running over a period of six months, was made with all forms ot lighting systems—direct, semi-indirect, and indirect—with various types of equipment; and, as a result, indirect lighting with half-watt type lamps was selected, and a trial equipment of the B.T.H. "Eye-rest" system was installed.

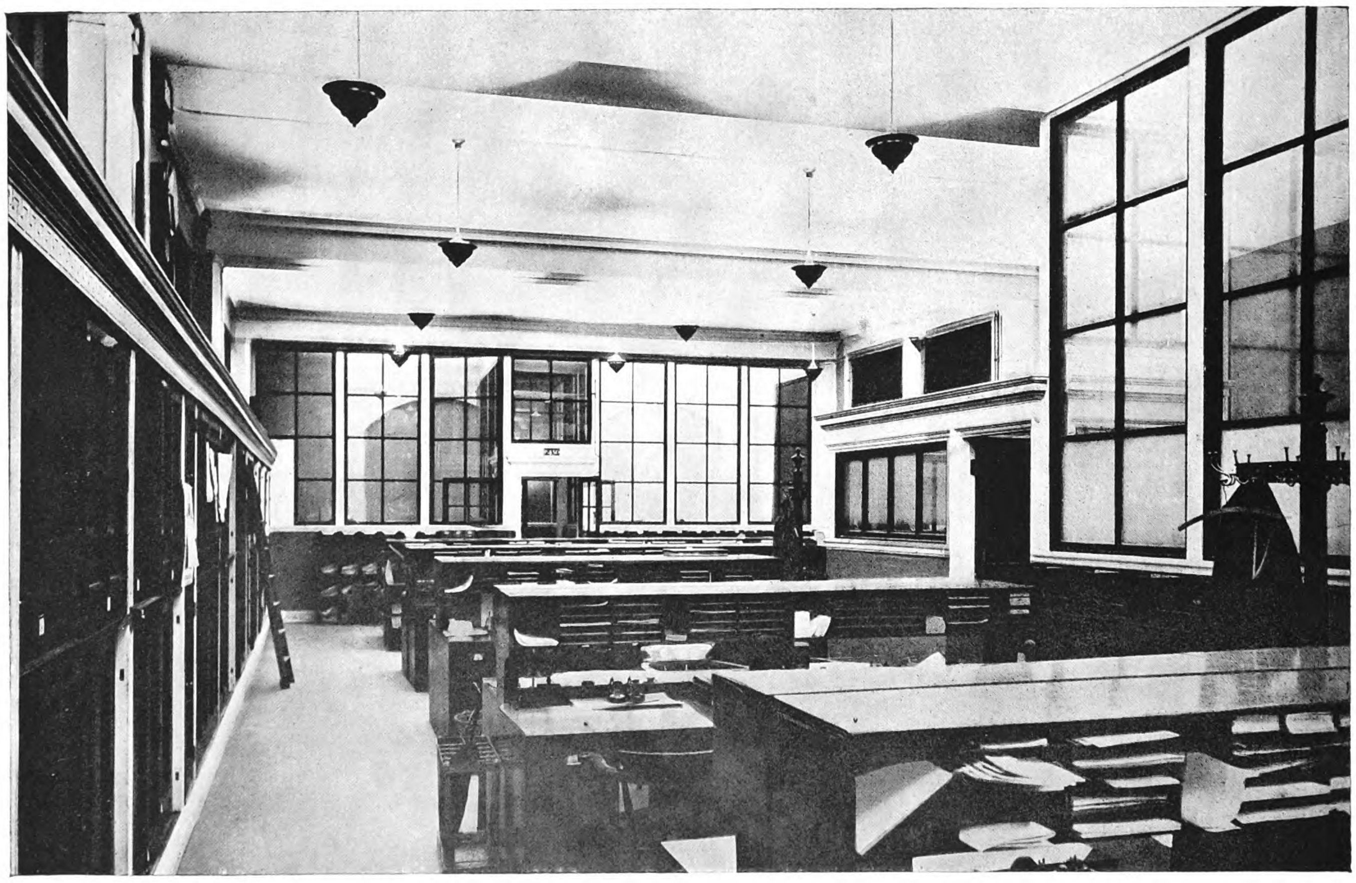


GENERAL TYPE OF FITTING.

A thorough test was given to it under practical conditions of office work, and subsequently this type of equipment was specified and ordered for the lighting of the whole premises. When the additional buildings of the group belonging to the department were completed a year or so later, the same system with half-watt type lamps was installed throughout.

The accompanying illustrations are reproduced from untouched photographs. The upper one shows the general type of fitting adopted throughout the buildings, while the lower, an office interior, shows the excellence of the lighting effect secured. It was taken by the actual light of the fittings installed.

The intensity of the light on the working surface is fully as strong as that which would be obtained from unscreened light sources; but the indirect principle ensures the elimination of all offensive glare and objectionable shadows.



THE NEW PREMISES OF THE CROWN AGENTS FOR THE COLONIES, MILLBANK, WESTMINSTER: LIGHTING INSTALLATION IN TYPICAL OFFICE.

John W. Simpson, F.R.I.B.A., and Flight-Lieut. Maxwell Ayrton, R.N., A.R.I.B.A., Architects.

NOTES OF THE MONTH.

The Study of Art.

Referring to a letter published in "The Times" of 30 May, in which Sir T. G. Jackson brings a heavy indictment against art critics, Professor P. Gardner, of Oxford, in the course of a long letter in "The Times Educational Supplement" of 11 June, declares that art criticism in England is at a low ebb, and has not, as it ought to have, saved us from the monstrous invasion by futurists and post-impressionists and other prophets of Baal. But I venture to suggest, he says, that it might be possible, instead of exterminating the critics, to try to improve the breed. The view that artists are the best judges of works of art is contrary to experience. Every critic should, indeed, have practised some branch of art; but it is not the case that the most successful artists are most trustworthy as critics. In fact, the contrary has been a commonplace since the days of Plato. Other writers maintain that the public taste needs no guidance, but can decide by likes and dislikes what is artistically good. This is a worse view than the other. The man in the street judges of works of art by two criteria—sentiment and fashion. Either of these criteria may lead him to admire what is very poor or very bad in principle. But whether or not the principles of art can be taught, the history of art certainly can be. Some knowledge of that history is in most countries regarded as part of a good education. While few countries are fuller of excellent works of art than England, yet there are few countries where knowledge in regard to such works is less widely spread or less earnestly pursued. Boards of historical studies throughout the country have almost invariably boycotted this particular branch of history. At Oxford they have notably done so. Knowledge of the history of art will not of itself enable one to produce masterpieces, but it may well prevent one from either producing or admiring abominations. The mischief, and the root of much mischief, is that in England men take to art criticism often, though of course not always, without sufficient training. An artist who has failed, or a newspaper writer who has no speciality, will turn to this branch of journalism as a resource. He will pick up superficial knowledge by talking to dealers and artists, and never reach a reasoned outlook in his subject. In this matter, as in all others, training and trouble are necessary. It is as necessary to study the history of art and the principles of art as it is to acquire some knowledge of technique. . . . While Oxford has given an admirable education in classics, in literature, in science, she has almost entirely avoided the whole world of art, as not her business. At last there has come to her some sense of sin in this matter. The question of setting up a board or committee to take up art-teaching is before the university. A battle royal is coming on between the votaries of the Humanities and the votaries of natural science. But the latter do not usually object to the study of art. . . .

* * *

Homes for Disabled Officers and Men.

The urgent need that some adequate provision should be made for officers and men of the Navy and Army broken in the present war is causing anxiety not only to the authorities, but to all who are interested in the future of this country and the empire. Already there is a very large number of these to be provided for, for whom a life in the open will be the only means of making a gradual but sure recovery from their disabilities. The subject has been taken up by a large and influential body of ladies and gentlemen, and a scheme has been put forward, under the name of "The Homestead Association," which it is hoped will be of material assistance. The objects of the Association are: To shelter disabled men; to endeavour to cure their disabilities by giving the men the comforts of a home, whether suffering from a permanent disability or not; to teach such occupations as the various disabilities will allow, special attention being paid to agricultural pursuits; and to co-operate with other bodies which may make it their business to provide employment to those whose condition of body is not perfect. The problem before the Association is to build small houses, and to purchase and utilize existing houses, some of which will be suited for married couples, with a sufficiency of land attached so as to provide profitable employment for the occupiers to utilize all their powers; and, while ensuring enough exercise not to overtax the strength of the disabled men, the object is to enable a man to support himself from the fruits of his own work, so that if possible he will not have to spend his pension, but may allow it to accumulate so that when he is further recovered he may be in possession of some small amount of capital. In these houses will be sheltered, too, such men as cannot be expected to work, but who are in need of perfect rest and idleness. The amount of land to be purchased will, of course, depend on the amount of money which it is possible to get from the public or from other sources, but it is advisable in the first instance not to attempt to carry out any such work unless it can be done on a large scale, which is one of the conditions of economy.

* * *

Degrees in Estate Management.

Whether a professional man who, in time of peace, collects university distinctions as ardently as some men collect butterflies can be truthfully said to grow "small by degrees and beautifully less," as the venerable misquotation has it, is a nice question. University standing, nevertheless, is popularly held to be a thing to be desired, and those who affect scorn for it are mostly those who for one reason or another have been unable to attain to it. London University, it is announced, is about to confer degrees in estate management—or rather, as we gather, it will include this subject in its examinations for the degree of Bachelor of Science, which already include veterinary science, economics, agriculture, engineering, mining, metallurgy, and horticulture. Details of the new curriculum are not yet available, but it is conjectured that it will include land surveying, estate accounting, town planning, the development of building estates, the valuation of land, taxation, rating and tithes, building construction, forestry, agricultural law, municipal and local government law, and urban public sanitation—a wide enough range, in all conscience; but, of course, this list merely delimitates the field of choice. It is not to be supposed, for instance, that the student who takes building construction will, as a rule, add forestry to his course, nor agricultural law. He might be expected, however, to take up the development of building estates, town planning, and municipal and local government law, with perhaps a little land surveying; but the grouping of the subjects into courses will be a delicate task for the university authorities, who would be well advised to confer with the R.I.B.A., the Society of Architects, the Institute of Builders, and the National Federation of Building Trades Employers.

* * *

Birmingham Town Planning.

The Birmingham City Council have given authority to their Town Planning Committee to prepare a town-planning scheme in respect of an area in the south-west of the city. The new plan will serve to bring within the jurisdiction of the committee the whole of the remaining undeveloped area on the south side of Birmingham.

NOTES OF THE MONTH.

"The Spirit of the Eighteenth Century."

Professor William Paton Ker, in a pamphlet issued through the English Association, sets himself the task of discovering the spirit of "The Eighteenth Century" (which is the title of the pamphlet), and he finds it expressed—in literature, music, architecture, and painting—in the convention which "keeps the artists from eccentricity, vanity, and 'expense of spirit.'" Was not this really a recovery of the Greek spirit? Professor Ker's summary of its influence might be, and often is, comprehended in one word—restraint. It is this quality which renders the drawing of classical models so fine a discipline for students in the architectural schools, and it is the irresponsible and wayward exuberance of Gothic that has almost everywhere ruled it out as inapplicable to this purpose. It is for the same reason that we always deplore the demolition of eighteenth-century examples of building, which are nearly always models of dignity and repose, but they are "though gentle yet not dull," and, to continue the quotation, "without o'erflowing, full." That is to say, they satisfy without satiating. It is hardly too much to say that the eighteenth-century tradition of sobriety and serenity in art is the most potent force in the architecture of to-day—the more so since, in principle if not in form, its genealogy can be traced to Greece, though not in an unbroken line.

* * *

St. Alphage, London Wall, to be Demolished.

Churches in the City of London have a habit of melting away, leaving, however, a little residuum in the socket. This is what is about to happen to the church of St. Alphage, London Wall. It is to be pulled down, all but what remains of the fourteenth-century tower, while the modern porch will also be retained. There is some doubt as to who was the architect of the modern portion of the church, which was built in 1777, probably from designs by Dance, on the site of the old hospital or priory of St. Mary the Virgin, founded for the sustentation of one hundred blind men in 1532. Although the church is of no great architectural value, its disappearance will deprive the district of another of the few remaining relics of its period, when the trader lived over his shop, and on Sundays went to his parish church. Now the world is his parish, or it was so before the War made travelling difficult, and the train or the motor enables him to put daily and swiftly a distance of fifty miles or more between his home and his ledgers; and if all the City churches had been allowed to stand, there would now be more parsons than lay church-goers in the City on Sundays. But the same swiftness of transport has created also the overseas commerce which makes merchants wealthy, and puts them in keen competition for business sites that have consequently grown so immensely costly that superannuated churches may not occupy them.

Commemorating Demolished Churches.

Usually the demolished church is commemorated by some small monument set up on or near its site. Sometimes this is merely a tablet grudgingly accommodated on the wall of a warehouse; sometimes it is a funereal-looking monument on which is carved a sketchy likeness of the church. One rather large monument, in a back alley on the southern side of Cannon Street, near the Mansion House Station, is no mere cenotaph, for the inscription bears that when the church was demolished in the interests of the Underground Railway, the human remains about it were carefully collected and lumped together in this tomb! One honours the intention rather than

Carcassing *for* Gas

THE Comptoir National d'Escompte de Paris is an interesting example of a building carcassed throughout for Gas—supply-pipes being laid to every fireplace, and provision made to enable tenants to have separate gas supplies for heating under any subdivision of the floors.

It is highly important, from the point of view of all concerned, that buildings should be carcassed with gas supply-pipes of suitable dimensions, and fitted with gas points at convenient places, during erection. Any structural omission at this stage can only be afterwards rectified at the cost of time and labour, much of which might otherwise have been saved—nor, at best, can the result be so satisfactory as where a scheme of installation has been thought out beforehand as a whole, and its lines, like the foundations of the building itself, "well and truly laid."

Proper provision for gas lighting, heating, and water-heating is, indeed, fundamental to any sound architectural and building policy of to-day . . . the experience of the war has given an enormous impetus to the substitution of gaseous for solid fuel.

There are, for instance, many rooms in a commercial hotel in which heat is required only intermittently. Yet it has been the practice of architects and builders in the past to design and fix coal grates in these rooms, and to provide immense flues to carry off the voluminous products of coal combustion, irrespective of the fact that in such cases a coal fire is the most extravagant and labour-making form of heating agent imaginable.

The provision—and pre-vision—of a gas fire installation would effect a distinct economy in building material. With gas fires the depth and width of chimney breasts can be reduced; the space hitherto devoted to coal storage can be allotted to other purposes; the size of the chimney flue can be materially decreased—whilst freedom from the danger of fire does away with all necessity for the massive "chimney places" for which the coal fire obviously calls.

Any architect or builder can have an objectlesson in the advisability of "carcassing for gas" who cares to take a stroll around an up-to-date commercial office. In room after room he will find a gas fire fixed in front of the permanent coal grate . . . permanent, in the sense that it was a pre-existing fixture, but already obsolete, since modern conditions and requirements demand the substitution of modern fuel.

Architects and Builders are invited to apply for any information to the Gas Light and Coke Company, Horseferry Road, Westminster, S.W. 1.

NOTES OF THE MONTH.

Mr. Caröe's Views on London's Bridges.

In the general introduction to a paper entitled: "London Bridges: their History and Architecture," read before the London Society last month, Mr. W. D. Caröe said that bridges, so to speak, are in the air, Southwark Bridge now being rebuilt, St. Paul's Bridge so far beyond the stage of projection that there are even critics who declare that a fiasco is upon us, Lambeth Bridge rapidly falling to pieces, while the relief of Thames at Charing Cross from present degradation, and a new Charing Cross Road Bridge as a Great War Memorial, are as close to our hearts as any London improvement ever was. . . . Is there any development of the art more directly useful and practical, or more definitely capable of combining grace and beauty with use and dignity, than the bridge of arcuated form? Here are no complicated trammels of planning, but wide interests of construction, capable of being reduced without loss of art to an exact science. Not for a moment do I suggest that a trabeated bridge is incapable of architectural success. But those monumental builders, the Romans, taught the world how the arch lends itself to bridge construction in the grand manner, and even when it is translated into his favourite metal the modern engineer, apt to think in steel trabeation, has discovered the arch's utility. Now, I am making no extravagant statement in claiming that in a city like London, whose situation and lay-out are initially due to and dependent upon the river, there is no definite architectural feature better able to combine in the fullest sense those qualities which make for monumental success in architecture than a bridge across the Thames. If well disposed and laid out—an obvious essential—it is seen or ought to be from all sides, whether in connexion with the river banks or from its flanking neighbours. In that sentence we condemn at once all bridges which can be classed as selfish and obstructive bridges, such as unduly confine the vista by their own existence. Bridges are not only to be considered as units, but each one, in its practical purpose, be it for road or rail, part of one collated and calculated system of communication from bank to bank, equally inter-relative as a system of monumental architectural expression, without which no city of a great and historic race is worthy to be other than a city of the dead, or worse than dead—decrepit, mentally and bodily—unfit. I do not think anyone here will dispute my premises. But before leaving the general question I would refer once more to the qualities of grace and line, which do not exclude those of power and stability, all of them capable of expression in fine bridge-building. No better text upon the subject could be found than the following: "Beauty does not require ornament or expense, but demands, what may be more difficult to supply, correct taste in the designer." Those words, at the opening of an able treatise upon bridge-building, go to the root of the matter. A word as to Thames Side. The existence of a shallow ford and easy crossing no doubt determined the position of the City of Westminster, just as the protection of a deep crossing determined that of the City of London. On these two bases London and its outgrowths have built themselves up. Art or imagination could not have set out a grander ogee sweep of water than Thames from Chelsea Reach to the Pool. Particularly as it sweeps past Westminster and the rapid bend whereof Charing Cross Railway Bridge almost forms the meridian, its possibilities are infinite with the transverse lines converging towards the blunt point of the Surrey shore. Nature has thus made our river majestic in its elements. It remains only for man to consummate Nature's handiwork, as befits the monumental development of a great city centre of Empire. On these grounds I have no hesitation in confessing myself at once a sceptic, or, if you will, a heretic, as to the views of those sentimentalists who would preserve and protect the Surrey-side mud flats for what they are. Were the greenery Pepys and Evelyn saw there now we should cry out for what must have rejoiced them, by the best of all harmonies—the harmony of contrast. But the mud flats of Southwark and Bermondsey are vastly other to-day. They are essentially artificial, precisely in the same sense as the colour of Thames water is artificial—man-made. As well keep Thames water filthy instead of silver as wish to preserve what is but an outgrowth of the seamier side of modern commercialism in its proverbially callous treatment of Nature. One feels there is an intimate relation between the Commercial Road and the Surrey mud flats. . . . What is needed upon the part of both London and Southwark to-day is an active practical interest and concentrated effort in this question which concerns each of them equally and both of them jointly. If the interest and effort are wide enough and intelligent enough, some definite advance worthy of London will doubtless be made. . . .

* * *

Air Raids and Bomb-proof Buildings.

Among the many suggestions for the protection of life during air raids, there is none (says a writer in "The Architects' and Builders' Journal") that seems to offer an effective solution of the problem. Short of erecting boom-proof shelters there seems to be no means of safety. To seek it in the basement is the course most generally recommended; but during a recent raid a bomb went through three stout floors. That the building was not demolished was because of its modern construction. Other instances in former raids prove conclusively that reinforced concrete comes out of the ordeal with high credit. On the other hand, brickwork buildings are commonly disintegrated by a direct hit, and occupants who might have escaped from the bomb are injured by the collapse of the building. There is some evidence that raiders now release simultaneously two bombs, the one explosive and the other incendiary. Here, again, reinforced-concrete construction has well maintained its reputation for fire-resistance. This clear indication of anti-air-raid materials, however, is satisfactory in only a very limited sense. It is on the possibility of using them to the utmost advantage that architects must set their wits to work. Having lost our insularity, we must in future build accordingly. At least the more important buildings in our great towns will have to be designed with a view to contingencies which formerly seemed so remote as to be completely negligible, but are now a matter of actual experience. Not that we lacked foresight, but that it seemed to us absolutely incredible that any nation believed to be civilized could become so diabolically depraved as to drop bombs on a civil population. Disillusionment must be promptly succeeded by energetic action. Provision for safety is a matter on which an advisory board of experts should be consulted. A correspondent of the "Westminster Gazette" writes: "With all the experience derived from scores of instances of damage to public buildings and private houses, I feel sure it would be generally appreciated if, for example, representatives of the Surveyors' Departments of the City Corporation and the London County Council were to formulate a series of recommendations in respect of each class of building, and see that they were brought to the notice of every occupier by advertisement or otherwise." That would be a good temporary measure, but it should not prevent the immediate formation of an advisory council or committee of safety to include architects and engineers who are free from official ties, and are therefore the more likely to put forward fresh ideas and express independent opinions. There is, of course, a two-fold object in view—to devise means that can be at once adopted, and measures that will require time for elaboration, and will therefore mainly affect the building construction of the immediate future. A small point is that, if sandbags remain the chief resource, roofs of the right shape and of sufficient strength to carry them will take the place of the prevailing type, which might be constructed of paper for all the resistance they offer to bombs and shrapnel.

* * *

Industries Fair for Glasgow.

Glasgow Corporation is to support another British Industries Fair to be held in the city early in 1918, and as adequate hall accommodation is still a dream of the future, the Special Committee on British Manufactures recommends the erection of a suitable temporary building on ground in Victoria Road belonging to the Common Good, which could also be used for other exhibitions, shows, and large public meetings pending the completion of a permanent hall. The cost of a sufficiently commodious structure is estimated at £10,000. It is understood that next year's fair, unlike that held at Govan a few months ago, will be specially representative of local industries.

Strengthening an American Bridge.

The first point, from its entrance into New York Bay, at which the River Hudson is bridged is seventy-three miles from the Grand Central Station, New York City, or more than halfway to Albany. This is by the cantilever bridge at Poughkeepsie, by which the Central of New England Railway joins the New York, New Haven, and Hartford Railroad with the systems in New Jersey and other States west of the Hudson River. The length of the bridge proper is 3,094 ft., of which there is a centre cantilever span of 546 ft., flanked by two anchor spans of 525 ft. each and two cantilever spans each of 548 ft. which have anchor arms forming 200 ft. shore spans. The height is about 165 ft. above water-level, and a double line of rails is carried. The bridge was opened in 1888 and was strengthened in 1906. With the great increase in engine and train loading of the past few years, the bridge could not safely carry these loads on both tracks simultaneously, nor could it be reinforced to such an extent as to do this. The alternatives were to eliminate the possibility of both lines being used at the same time or to build a new bridge. The former plan was adopted, as the cost will be relatively small, and although the traffic is heavy, it can be handled without trouble over the single-track links. The principal change in the bridge will be the reconstruction of the floor system, using long and heavy floor-beams that will distribute the load over the three lines of trusses. With the present double-track arrangement each track has an independent floor system.

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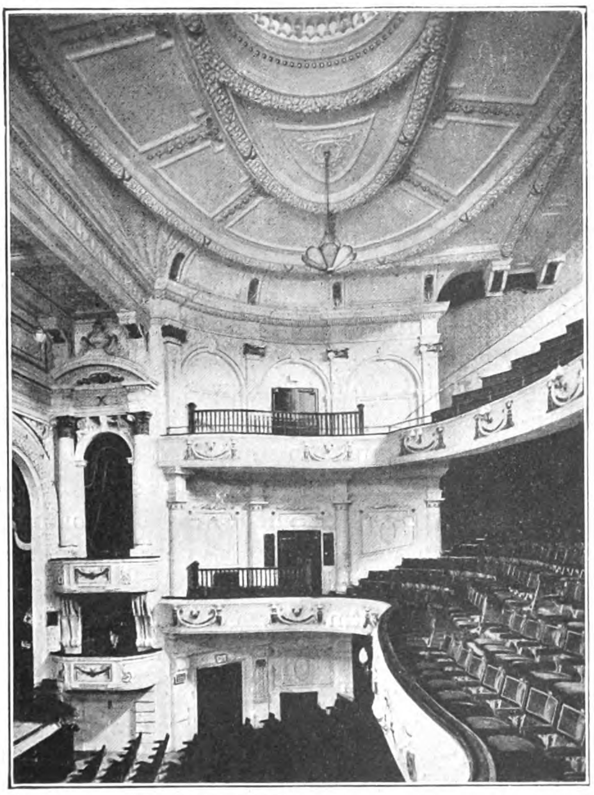

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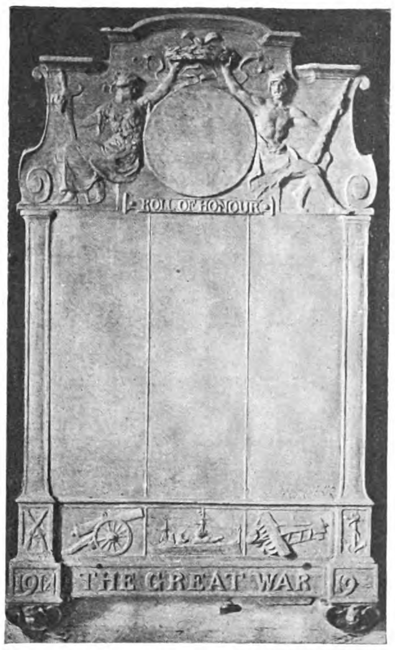

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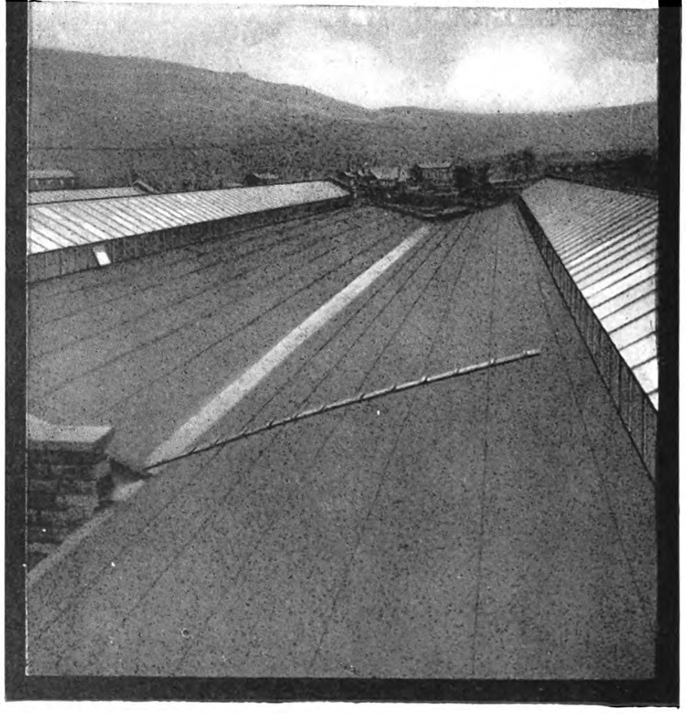

NOTES OF THE MONTH.

A Broad View of Town Planning.

City-planning, says a "Times" reviewer, is an attempt to produce the finest and most efficient cities, peopled by the best and happiest citizens, that our modern industrial life will allow. We do not agree that city-planning is a purely engineering problem. We feel that many problems outside engineering are involved, and that just as the architect controls the design and co-ordinates the work of the different trade specialists under him, so it is necessary to have a trained city-planner capable of co-ordinating the work of the civil engineer, the social science expert, the architect, and the park engineer—a man with a mind not obsessed by the petty details of any one of these different branches, but having the broad grasp of the main principles of all, and so able to combine them into one harmonious whole. City engineers have notoriously failed in this broad outlook; they have been more concerned with the surface of a street than with its direction; more occupied with the durability of a structure than with its general appearance. We still need all the details well carried out, but we want them to adorn something worthy of the time and trouble they entail. The architect is also inclined to think too much of spectacular effect and too little of the necessary traffic problems, whilst the social reformer would confine all his attention to the slum districts and better housing. But not one of these by itself could make the city that "community of well-being" which it should be. Dublin, for instance, with the houses once occupied by its wealthy citizens now let out in single rooms and turned to slums, shows that good building is not enough. Good building, sound finance, efficient engineering, and a well directed effort towards social betterment are all necessary to produce a well-balanced plan of growth.

Cracks in the Tower of London.

"The observations on the rate of growth of cracks in the buildings of the Tower of London," says the report of the National Physical Laboratory, presented at the annual meeting, "have been continued. No serious disturbances have been detected, but careful examination of the roadway on the quay wall facing the river has revealed that movements of the wall, not amounting to more than a few hundredths of an inch, have taken place, presumably of the nature of a slide towards the river."

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EVENING CLASSES.

The Carpenters' Company Evening Class in Design has been suspended for the duration of the War.

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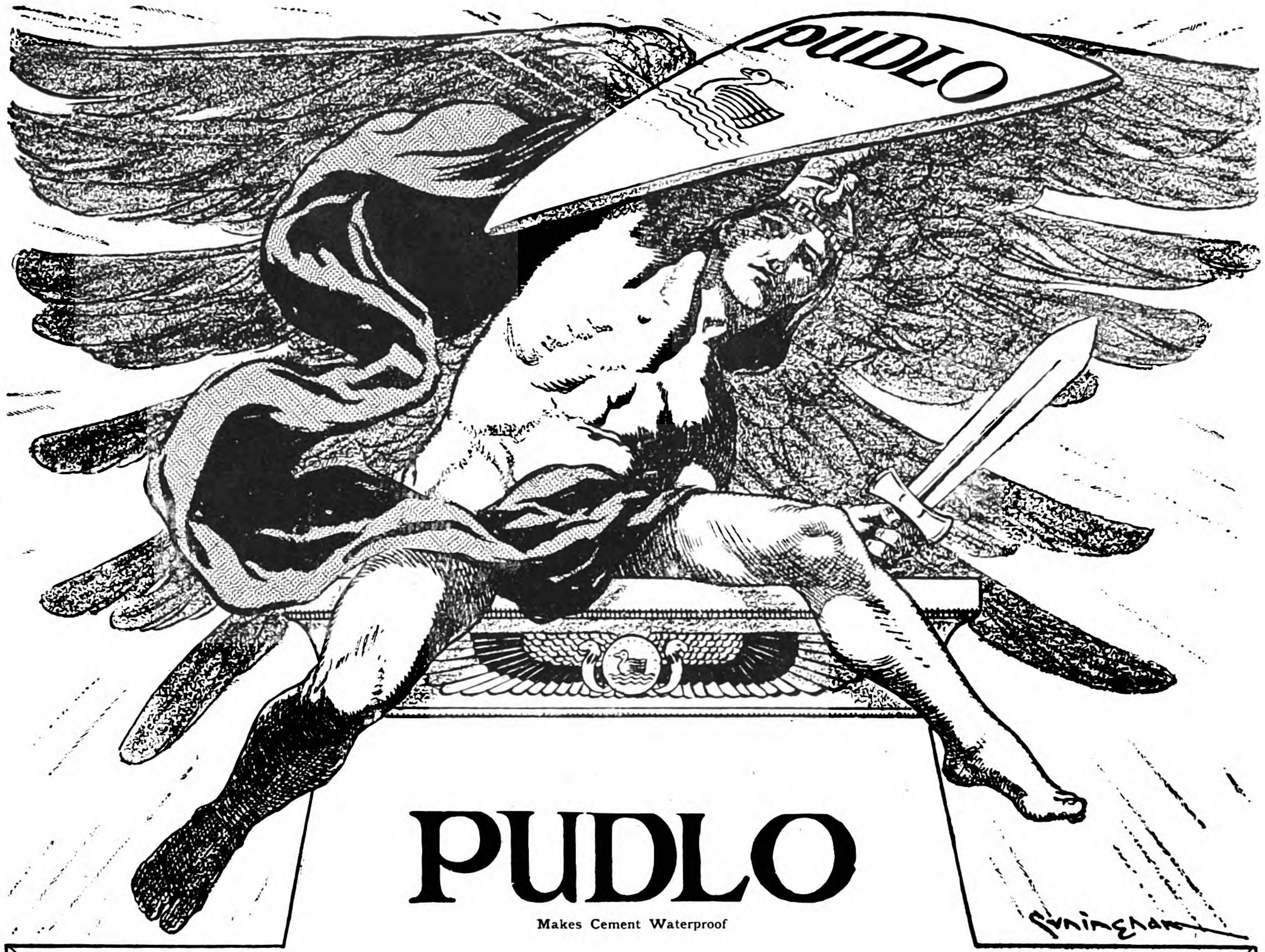

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Architects and Builders have shown great interest in the Pudloed cement interior treatment for overcoming dampness in walls constructed of beautiful brickwork and stonework which would be spoilt by any exterior application. Pudloed cement renderings have also been used for this purpose in buildings the ancient exteriors of which constitute their chief charm.

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NOTES OF THE MONTH.

The Ladies' Gallery Grille in the House of Commons.

It is stated that the removal of the gilded iron grille in front of the Ladies' Gallery in the House of Commons was to cost no more than £5. Nevertheless, the work was doubtless done with extreme care, and without detriment either to the grille itself or to the fabric to which it was fixed. It is worth very much more than its value as scrap-iron, and should be preserved in the London Museum as a relic of the barbarous times when woman was regarded from a mediæval point of view; it was suggested subconsciously, perhaps, by the mediæval style of the building. Although it was got down without damage, it will show traces of the injury inflicted upon it when, in 1908, Suffragettes chained themselves to it, padlocked the chains, and threw away the keys, when portions of the grille had to be sawn away. In the Ladies' Gallery there is accommodation for only about thirty-six persons. There need arise no question of enlarging it; for surely, in these spacious times, ladies will no longer be excluded from the Strangers' and Speaker's Galleries; but perhaps the Ladies' Gallery will be reserved for women who prefer not to mingle with the men, in which case its capacity will be ample, if one may judge from the signs of the times.

* * *

The War Memorial Problem.

In the course of a long letter to "The Times," Mr. Pittendrigh Macgillivray makes out a strong case for delay in the execution of War memorials. Frankly, he says, the War memorial business is likely to become rather a terror throughout Europe unless the financial condition of the nations proves such as to hold it in check for a time—for such a length of time as will allow some measure of the inevitable blatancy and vulgarity to evaporate. Victory, we believe, will be ours, and there is little doubt that the most obvious symbolic perpetuation of it, as in all great days of the past, will be at the hands of sculptors. Out in the open, fronting the sun, in the midst of our most public places, their documents of bronze, marble, and granite are to be an enduring record of the event. In this aspect War memorials become a serious concern to the nations. Nowhere ought they to be undertaken lightly. They should not be the product of an immediate outburst of foolish extravagance and jingoistic enthusiasm. Those who love sculpture and appreciate the high moral nature of monumental art and who have visited Berlin will remember the vile war monument there and the horrible gilt-bronze statuary in the War Museum. The victory of 1870 was commemorated in the capital of Germany by sculpture in the worst and most objectionable terms and spirit. Needless to say, the German sculptors reflected and created in the spirit of their people; and the Nemesis of that spirit which is behind the atrocious war monument of Berlin, with its bracelets of French cannon, thunders upon the people of Germany to-day. Certainly we must wait until the War is over before beginning its memorials. For better reasons than the return of our young sculptors from their noble duties at the front, we must wait. We must wait for a calm and a long, wise outlook as to the true nature of the things we want to have set down in bronze and granite for all time. We should wait until mere realism of matter and incident becomes transmuted into poetic symbols and expressions of psychologic value and ennobling effects.

* * *

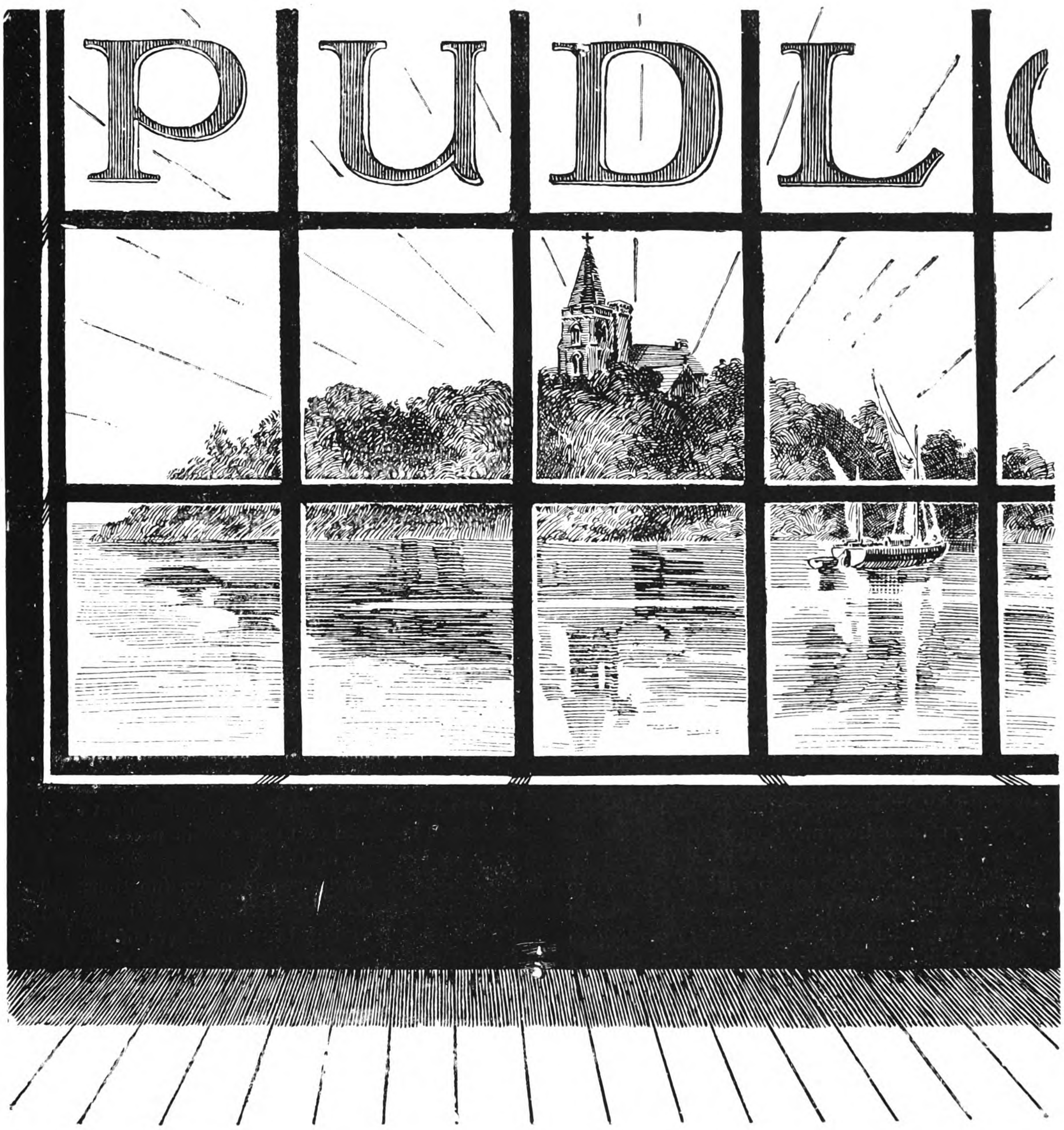
Aberdeen's Proposed War Memorial.

The proposal for the erection of a memorial to those who have fallen in battle belonging to Aberdeen and district has now taken concrete shape. At a recent meeting of the Finance Committee of the Town Council drawings of the front elevation and the interior of the proposed memorial—the work of Dr. Marshall Mackenzie—were submitted. As the proposed memorial is intended to fit in with the Art Gallery extension scheme, the Council have to co-operate to some extent with the Art Gallery Committee, who will have a voice in the carrying out of the arrangements. It is proposed to erect the memorial, as already stated, at the junction of Blackfriars Street with School Hill. The plans show a noble façade which in itself will be a conspicuous architectural feature of the district. Internally the memorial hall as planned will be circular in shape, and the walls are proposed to be panelled in marble. On the panels it is intended to inscribe the names of all those belonging to Aberdeen city and district who have laid down their lives for their country in the War. About ten feet in front of the panels there will be a circular row of pillars supporting a balcony, and, surmounting all, a lofty dome, which it has been suggested might be painted with some appropriate design by a prominent artist. The pillars are to be of polished granite, and of a memorial character, names being inscribed on the square base at the foot of each. There will be an entrance from the frontage, and also access into the sculpture court of the Art Gallery, so that visitors to the memorial hall might inspect the sculpture collection and pictures without having to go outside to the gallery entrance. From the balcony there will also be an entrance to the picture galleries upstairs, so that visitors may wander at leisure among the whole art treasures belonging to the city. It has further been suggested that in the centre of the memorial court there might be placed a replica of the famous piece of sculpture, "Victory," while another proposal is that in the open space in front of the building there should be placed an emblematic statuary group. In addition to the court, it is proposed to complete the scheme by carrying out the long-looked-for Art Gallery extensions.

* * *

The Destruction of St. Quentin Cathedral.

Definite information concerning the cause of the destruction of St. Quentin Cathedral is at present lacking, but there is little reason to doubt that the Germans have added yet another crime to their black record of vindictiveness in occupied territory. A newspaper correspondent states that, quite unaccountably, so far as he was able to observe, the cathedral suddenly became enveloped in smoke. Soon flames burst forth, and the fire increased in intensity. Towards midnight the imposing building, dominating the plain with its lofty mass, disappeared in the flames, the sinister light of which was seen for nearly twenty miles around. The Germans will not be able to assert that the fire was started by French shells, for since St. Quentin has been in proximity to our lines not a French projectile has fallen on the town. The whole superstructure which formed the lofty roof has disappeared. The apse has completely fallen in. It appears that the four walls, blackened by the flames, have alone survived, with the towers breached, jagged, and scorched by fire. The mental and moral outlook of the German, says a writer in "The Morning Post," seems to be perverted by a kind of criminal astigmatism impossible to correct by the lens, so to speak, which regulates normal intellect and ethics. He regards conduct from a view-point hitherto unknown to civilized races. The laws of God and man, the beauty of their creations, are nothing to him, though he blasphemously affects to be the protector of both. He is ever boasting of the services Germany renders to culture. The unfortunate city of St. Quentin affords two instances of the character of his services to culture.



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NOTES OF THE MONTH.

"*Hands Across the Sea.*"

The following letters have passed between the Royal Institute of British Architects and the American Institute of Architects:—

14 June 1917.

To the President and Council of the American Institute of Architects.

GENTLEMEN,—Probably no group of Britons has been wont to enjoy a closer bond of intimacy and mutual understanding with its corresponding group across the Atlantic than that which has so long and so happily subsisted between the architects of your great country and of ours.

For this reason, if for no other, it seems natural to us to yield to a very evident desire among our members, the desire to give expression to the cordial and affectionate satisfaction which we feel in the recent practical evidences of close community between our nations.

The world-struggle, a fight not on our side for material possessions but for the maintenance of those ideals which are the most precious heritage of man, is, as we all feel, not one in which the exponents of our art are without interest.

Architecture, the least luxurious and the most humane of the arts, can never be aloof from the deeper and worthier instincts of mankind. We feel confident, therefore, that if we, as representing in our degree the architects of Great Britain, send you at this momentous juncture a word of heartfelt international greeting you will not think that we are departing from the proper functions of a professional Institute.

Had we any doubt on this point, that doubt would be removed by our remembrance of the remarkable utterances of Mr. Cram, in October 1914, and the comments of Mr. Clipston Sturgis on the position of England in the war, which, together with other expressions by American architects on the subject, have been very eagerly read and warmly appreciated here.

Gentlemen, the heart of England has been warmed by America's action. We British architects are not the slowest to feel that warmth: and knowing that with you, too, the pulse of national life is strong, we feel a lively satisfaction in sending to you—as architects to architects—our very cordial welcome and our acknowledgment of profound pleasure in this union of the already kindred races.

In conclusion, we would beg that, so far as it may be practicable, you will regard this message of ours as a message to the general body of architects in the United States.

With renewed expressions of brotherly goodwill,

We are, Gentlemen,
Yours very faithfully,

ERNEST NEWTON, President.
HENRY T. HARE, President-Elect.
PAUL WATERHOUSE, Vice-President.
E. GUY DAWBER, Hon. Secretary.

The following reply has been received from the American Institute:—

The Octagon, Washington, D.C., 12 July 1917.

To the President and Council of the Royal Institute of British Architects.

GENTLEMEN,—True it is that the exponents of our art, as represented by the Royal Institute of British Architects on the one side of the Atlantic and by the American Institute of Architects on the other, have happily enjoyed that very real understanding and that close bond of intimacy which spring from a unity of purpose and of ideals.

At the moment when our country has announced to the world, and especially to our autocratic enemy, its common interest with your great country and our other Allies, your warm welcome is deeply appreciated.

Through the long months and years of your self-sacrificing struggle, when the words and acts of many of our profession betokened a sympathy which official neutrality could not stifle, our hearts have bled not alone for the lives so freely given of the youth of promise in our profession, but for the wanton destruction of those monuments of our art which age and tradition have made our common heritage.

And through these months of the duration of *our* war for the maintenance of those ideals which make of the world a worthy and happy dwelling-place for man, we have longed for the striking of that inevitable hour when we might stand shoulder to shoulder, brothers in arms as well as brothers in art, while our country, slow to anger, perhaps, but flaming at its core with a burning conviction of the righteousness of our common purpose, might throw its pent-up energy into the fray which threatened the liberties of the civilized world.

And so to you, Gentlemen of the Royal Institute of British Architects, greeting and heartfelt appreciation of the impulse which prompted your ringing words of welcome, and with our greeting comes a reciprocating impulse to extend our eager hands to you across the sea which no longer separates us.

With renewed thanks for your message of welcome into the true brotherhood of man, we are,

Yours very faithfully,

JOHN LAWRENCE MAURAN, President.
WILLIAM STANLEY PARKER, Secretary.

The Council have offered the hospitality of the Institute to American architects on service who find themselves on this side of the Atlantic and within convenient reach of London, and have extended to them certain privileges of membership, such as the use of the Institute premises and library and attendance at meetings and other functions. They are also given the opportunity of borrowing books from the Loan Collection. It is hoped that members of the Institute coming in contact with American architects will make this offer known to them.

* * *

The Proposed National Memorial.

It was well within the first great phase of the War—the phase of hard uphill fighting for the Allies, when the advantages of long preparation were still with the enemy, and many of our worst troubles still lay before us—that the decision to found a National War Museum was taken by the Government. Few then believed, perhaps, that the struggle would enter upon its fourth year with the end not yet in sight, and no combatant on either side forced to lay down arms. It is in these circumstances (says a leader-writer in "The Daily Telegraph") that Sir Alfred Mond's Organizing Committee has submitted its plans to the War Cabinet. What we desire to urge in this connexion—not for the first time—is that the enormous growth in the magnitude of the War since the time when this enterprise was set on foot, the far greater scope and intensity of the British war effort, the more perfect proof of the spirit that is in this people, impose upon us the duty of setting up a foundation which shall be much more than a collection of objects and records of that somewhat arid character, housed in that somewhat sepulchral style, which is associated with the word "museum." We ought, in fact, to make this an undertaking in the grand manner, to approach

[*Continued on page* xx

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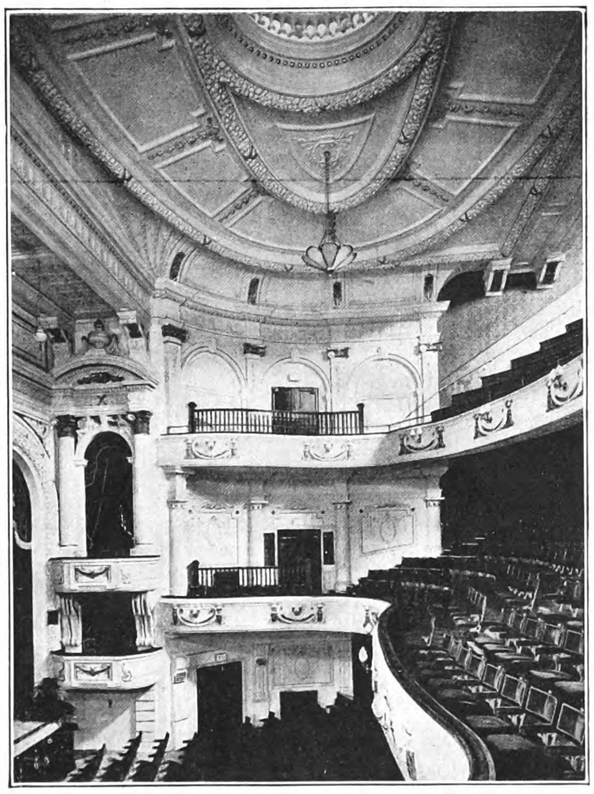
it with an imagination quickened by the noble and tragic memories of what has passed, and take for our principle in the work of creation the setting up of a worthy national memorial as well as a complete national record. It ought to be in itself the monument of the War, a place planned with such majesty of design as befits the thing commemorated; a building by far more beautiful and impressive than any of the columns and statues recalling our earlier pride of arms, as this War is greater and higher of purpose than any in the past. It should be worthy of the first of our wars that was made by the will of the whole united nation, and waged with the strength of its whole manhood and with all its resources. It should be worthy of that verdict of history upon this generation of Britons which we can already foresee. It should express our own pride in our own country's achievement. If all this is to be so, the enterprise cannot be pursued upon grudging and cheeseparing lines. . . . The plans prepared by the committee are, we ("Daily Telegraph") believe, inspired by the ideal which we have tried to indicate. Some of the larger features of the scheme which they are understood to have submitted comprise the Central Hall of Honour, where the splendour of the setting should be in keeping with the fame of those immortalized there in painting and sculpture, the Memorial Gallery, where the name of every man who gave his life in the War should be engraved on bronze, along with the records of ships or military units which have left their corporate mark on the history of these years; the two great glass-covered courts for the display of the mighty war machines of all kinds; and the surrounding buildings to house the smaller collections, the records, the photographs, and the war library. It is an ambitious plan; and it ought to be. It is suggested that a fitting site could be found on the land adjoining the new County Hall on the south bank of the Thames by Westminster Bridge; and we doubt if a better place could be chosen than this, so near the heart of the Capital, where the new building would gain grandeur from the presence of the river and from the neighbourhood of other noble architecture.

* * *

Soane and his Museum.

Possibly the new curator of Sir John Soane's Museum, says "Diogenes," in a recent "Here and There" discourse in "The Architects' and Builders' Journal," will effect several reforms there; but by what magic he will be able to overcome the rather embarrassing restrictions imposed upon him by a rather foolishly drafted Act of Parliament one may not venture to conjecture. I was about to say, in hackneyed and thoughtless phrase, that there is room for reform. But there is not, and that is the trouble. Sir John Soane himself was greatly hampered for space, and from time to time, as his collection grew, made many additions and alterations. Further expansion would be welcome, but, in the circumstances, seems impossible. In the museum handbook it is stated that the oldest portions of the building are the gallery under the dome and the adjoining lobbies; the room that is now the new picture-room, which was originally Soane's private office; and the pupils' room and the gallery, under which were formerly his clerks' offices. It is an agreeable exercise to stand in these places and try to reconstitute the busy scene when Sir John was struggling with the enormous amount of

[*Continued on page* xxii



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work that was heaped upon him after he had become the most prosperous architect of his day. Picture him there, in his high cravat and blue surtout, entertaining the rich client with dry sherry and anecdotes of the Peninsular War, which was still raging when, in 1812, Sir John pulled down No. 13 Lincoln's Inn Fields, and rebuilt it to his own designs, "incorporating with it the gallery, etc., already built in the rear, and giving up the occupation of his old home, No. 12." In 1814 he pulled down and re-erected No. 14, and built at its rear the Hogarth Room and the Monk's Parlour. Under the terms of the special Act of Parliament (3 Will. IV. cap. 4) which Sir John obtained in 1833, there can be no further expansion of the museum, nothing may be added to the collection, and the arrangement of the house and contents may not be "unnecessarily" disturbed. This seems rather to tie the hands of the curator, unless he can persuade the trustees that there is some hitherto undiscerned virtue in "unnecessarily." Surely it is necessary that there should be better accommodation for the "amateurs and students in painting, sculpture, and architecture," mentioned in the Act; but how to provide it seems to be a pretty tough problem, which, however, a little ingenuity may possibly solve. A liberal construction of that rather vague adverb might perhaps admit of the necessary expansion without breaking faith with the founder; but this is clearly a case of conscience and for counsel's opinion. Common sense might suggest one course, and legal interpretation its very antithesis—the two things so seldom meet together like mercy and truth to kiss each other.

Mr. Thomas H. Mawson and Salonika.

It is announced that Mr. Thomas H. Mawson, of the School of Civic Design, Liverpool University, has been invited by M. Venizelos to undertake the replanning of Salonika. It will be remembered that a disastrous fire occurred there recently, involving the destruction of as much as one-third of the city's total area. At the outbreak of the war Mr. Mawson had in hand a commission for the replanning of Athens. Thus, by a curious chain of circumstances, two of the most important commissions with which he has yet been entrusted emanate from Greece. At present Mr. Mawson is busily engaged in London, completing an organization for the creation of industrial villages and suburban settlements for partially disabled soldiers and sailors. He has embodied the idea in a volume recently published under the title of "An Imperial Obligation," to which Sir Douglas Haig has contributed a foreword.

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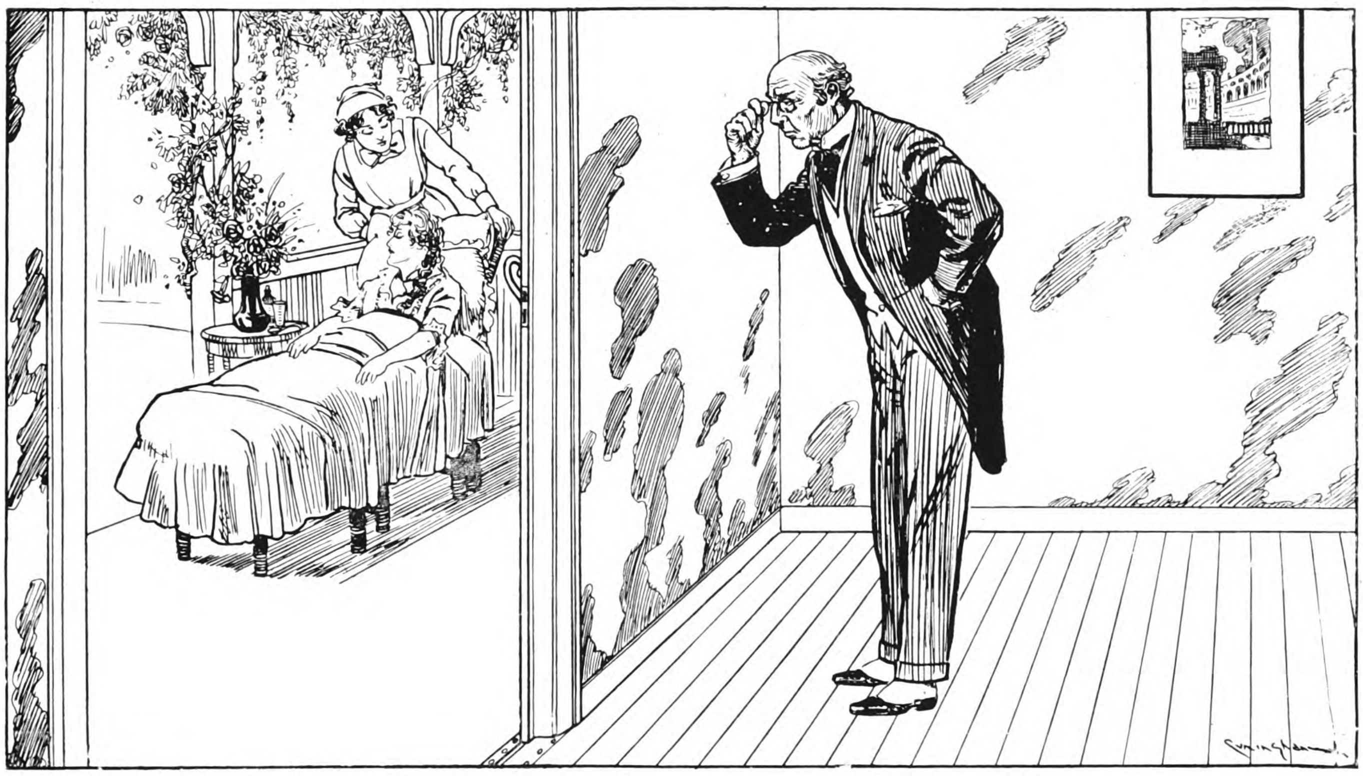

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NOTES OF THE MONTH.

The True Function of Art.

Mr. W. Rothenstein, Professor of Civic Art at Sheffield University, has just issued through Messrs. Constable & Co., "A Plea for a Wider Use of Artists and Craftsmen," which embodies a lecture delivered by him at Sheffield. What the true function of art is, he declares, "the Church and State and our public bodies have long since forgotten. All that remains of the long and fruitful encouragement of one of the first elements of the human spirit is a dim, mechanical sense that some place must be found for art in the City; and this is not so much because the creative spirit in man is recognized as being one of his chief glories, and is therefore to be generously acknowledged, but rather because the appreciation of works of art is regarded as a necessary element of general culture." It is against this false conception, or this blank ignorance, of the function of art, that relentless war must be waged. As Mr. Rothenstein indicates pretty clearly, artists themselves are in great part responsible for the public confusion of mind with respect to art, which has been too much glorified as a thing apart from common life, and is thus regarded by the generality, many of whom secretly or openly despise it for its supposed lack of "utility." But utility may be either contingent or remote, local or diffusive; and where the effect is remote from its cause the relation is imperceptible; and because "faith is the evidence of things not seen," and because the study of psychology and other impalpable entities has been grossly neglected, faith is feeble, and consequently the average man, while he may grudgingly admit that "a thing of beauty is a joy for ever," cannot perceive that it has any value beyond eye-service. That it penetrates much deeper cannot be conveniently demonstrated before committees, and hence the official scepticism which is operating so disastrously against the arts. If architects were less reluctant to enter public life, they could do fine educative work, and secure a reformation that it is almost hopeless to attempt from the outside.

* * *

Architects and Reorganization after the War.

A committee known as the Architects' Reorganization Committee, representative of all the architectural societies both in London and the provinces, has been appointed to prepare schemes for the reorganization of the architectural profession after the War. In its deliberations it has particularly in mind the welfare of architects at present on war service and those whose practices have been destroyed by the War. The committee proposes to issue from time to time reports and suggestions for dealing with various problems which will arise in connexion with the profession upon the demobilization of the forces, and hopes that as a result of its work the re-establishing of architects in practice after the War will be facilitated and the position of the profession improved generally. The joint hon. secretaries of the committee are: Mr. C. Macarthur Butler, secretary of the Society of Architects; and Mr. F. R. Yerbury, secretary of the Architectural Association.

* * *

Memorial in St. Paul's to Sir George Martin.

A memorial tablet to Sir George Martin, late organist of St. Paul's Cathedral, has just been unveiled in the crypt of the cathedral by Sir Alexander Mackenzie. After paying for the tablet, which is the work of Mr. Henry Pegram, A.R.A., the balance of the memorial fund will be invested in the purchase of an annuity in Lady Martin's name, but at her death an equivalent sum will be invested to provide a Sir George Martin scholarship or scholarships for boys leaving the choir school.

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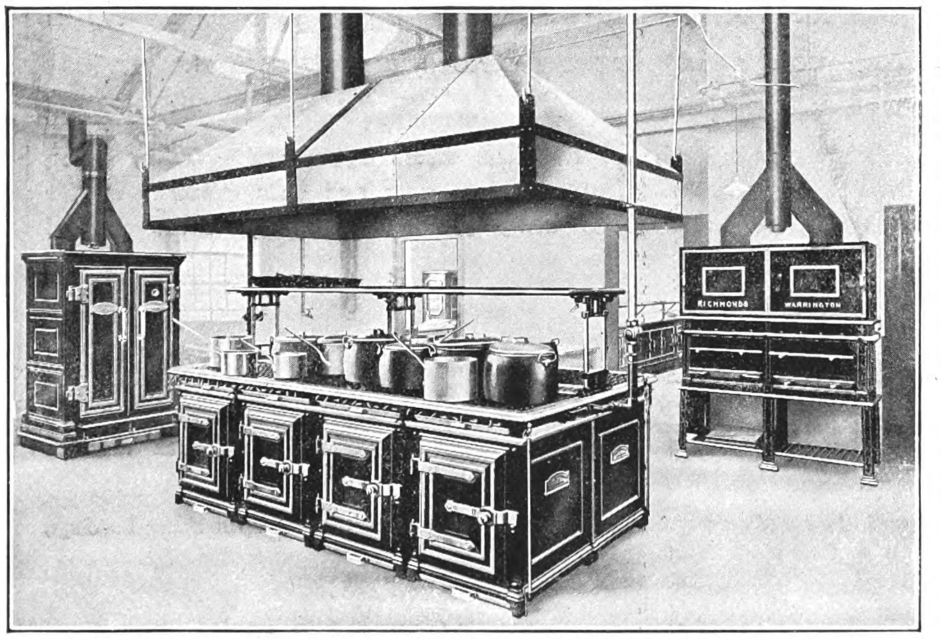

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NOTES OF THE MONTH.

Durham Cathedral: Reopening of the Great Western Doorway.

A great change has been made in the appearance of the interior of Durham Cathedral by the reopening of the western doorway. Originally this was the main entrance to the cathedral, but, on the erection of the Galilee Chapel at the west end by Bishop Pudsey (1153–94), the present principal entrance on the north side was erected by the same prelate, and became the main doorway. It is stated that since the days of Cardinal Langley, early in the fifteenth century, the great double western door has been opened only on special occasions, the last being the memorial service for the late Queen Victoria. Now, it would appear, the intention is to keep the door permanently open. The result is that the western extremity of the cathedral, hitherto rather gloomy, is now brightly lighted from the Galilee Chapel, while the vista along the aisles has been greatly extended, and the view into the Galilee Chapel is an interesting one at certain angles, especially those which reveal the fine arcades of ornamented arches within the chapel.

* * *

Reparations at St. Paul's.

It is stated that the authorities of St. Paul's Cathedral have recently discovered documents which disclose the fact that as far back as the eighteenth century the safety of the building had been a serious proposition. During the work of restoration it was found necessary to close the edifice entirely for nearly two years. Fortunately, to-day, the work of repair is being accomplished without materially affecting the services. By slow stages the foundations of the south-west pier have been consolidated and the work so far completed that the scaffolding in this part of the building has been removed. The workmen are already placing hoardings in part of the south transept, in order that the work on the south-east pier may be started at an early date. Before work for the consolidation of this pier is started, however, it will be necessary to remove the three statues at its base, and this is a delicate task requiring most expert and careful handling of statues that hardly deserve it.

* * *

The Furniture of David Garrick's Bedroom.

Last year the Victoria and Albert Museum was fortunate enough to obtain the painted bedstead, with its original Indian cotton hangings, which was made between 1770 and 1775 for David Garrick's Villa at Hampton. The bedstead was presented by Mr. H. E. Trevor, a descendant of David Garrick's brother George; and now, through the generosity of this gentleman, with the co-operation of some admirers of David Garrick, the museum has secured the rest of the contemporary furniture which was made for the Hampton bedroom. This consists of three wardrobes, a corner cupboard, a basin-stand, a dressing-glass, and five chairs. With the exception of the dressing-glass, all the furniture is decorated in green and yellow, in the same manner as the bedstead, some pieces having designs of Chinese figures and landscapes. The dressing-glass is supported by snakes in carved and gilt wood, and is decorated in a style designed to suggest Dresden china. Apart from its historic interest, the furniture presents an attractive scheme of decoration which should be useful to modern artists and decorators. It is at present exhibited in Room 57 of the Woodwork Galleries of the museum.

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NOTES OF THE MONTH.

The Hope Heirlooms.

It is not surprising to read that at the sale of the Hope heirlooms housed at Deepdene Mansion, Dorking, "prices ruled high," and that there was "spirited bidding for the antique furniture." Precisely what significance attaches to the word "antique" as here applied we are unaware; but if, as may be assumed, much of the furniture was designed by Thomas Hope himself, in the English Empire style, the term is not entirely happy; for Hope worked in an essentially modern spirit, although, following his friend Percier, he chose for his *motifs* the best forms that he could find in the best periods of ancient civilization. Hope had the rare felicity of designing for love of the work. He was of the select company of "divine amateurs," free from the necessity of working for bread or of pleasing capricious patrons. Wisely choosing Percier for his guide, he otherwise gave free play to the fine artistic taste which had been engendered in the house of his father, a rich banker, who had collected at Haarlem a magnificent treasury of objects of art. Thomas Hope was born about 1770 (the exact date has not been conclusively ascertained), and, early exhibiting a keen love of architecture, was able to gratify it by spending eight years in Italy, visiting also Egypt, Greece, and the East. Further, his wealth enabled him to collect a large number of antique marbles (including the famous Hope Athena, of the period of Phidias), which he at first placed in his house in Duchess Street, Cavendish Square, removing them ultimately to the classical mansion he built for himself at Deepdene, near Dorking. Hope was not only an amateur in design, but was also a liberal patron of the arts, frequently commissioning, for example, Flaxman, of whose work specimens were probably among the statuary which has been dispersed at the Deepdene sale. One can only trust that the more precious of the art treasures will remain in the country. In any case, however, they will no doubt be widely scattered. So far as Hope's own designs are affected, regret at the dispersal loses some of its poignancy when we remember that Hope has left a permanent record of his peculiarly refined genius in his book on "Household Furniture and Interior Decoration" (1807), from which several plates have been opportunely reproduced in recent issues of "The Architects' and Builders' Journal." Hope's great service to art has been neatly summarized by Mr. A. E. Richardson, who, in an article on "The Empire Style in England," in THE ARCHITECTURAL REVIEW for November 1911, says that, "He attempted to raise furniture design from the rank of a cringing second-rate art practised by tradesmen, to the level of a living and first-rate art closely allied to architecture." There is some slight consolation in the thought that his examples, being scattered, will therefore assume a wider influence.

* * *

Degas and Hemy.

The death of Mr. Hilaire Germain Edgard Degas at the age of eighty-three was quickly followed by that of Mr. C. Napier Hemy, R.A., who recently passed away at the age of seventy-six at Falmouth. Degas's early struggles and ultimate triumphs are familiar history. He is perhaps best described as a realist with a romantic touch, and he was only a little less great than Ingres. Hemy may possibly rank hereafter as our greatest marine painter; his temporary popularity, at all events, was indisputable.

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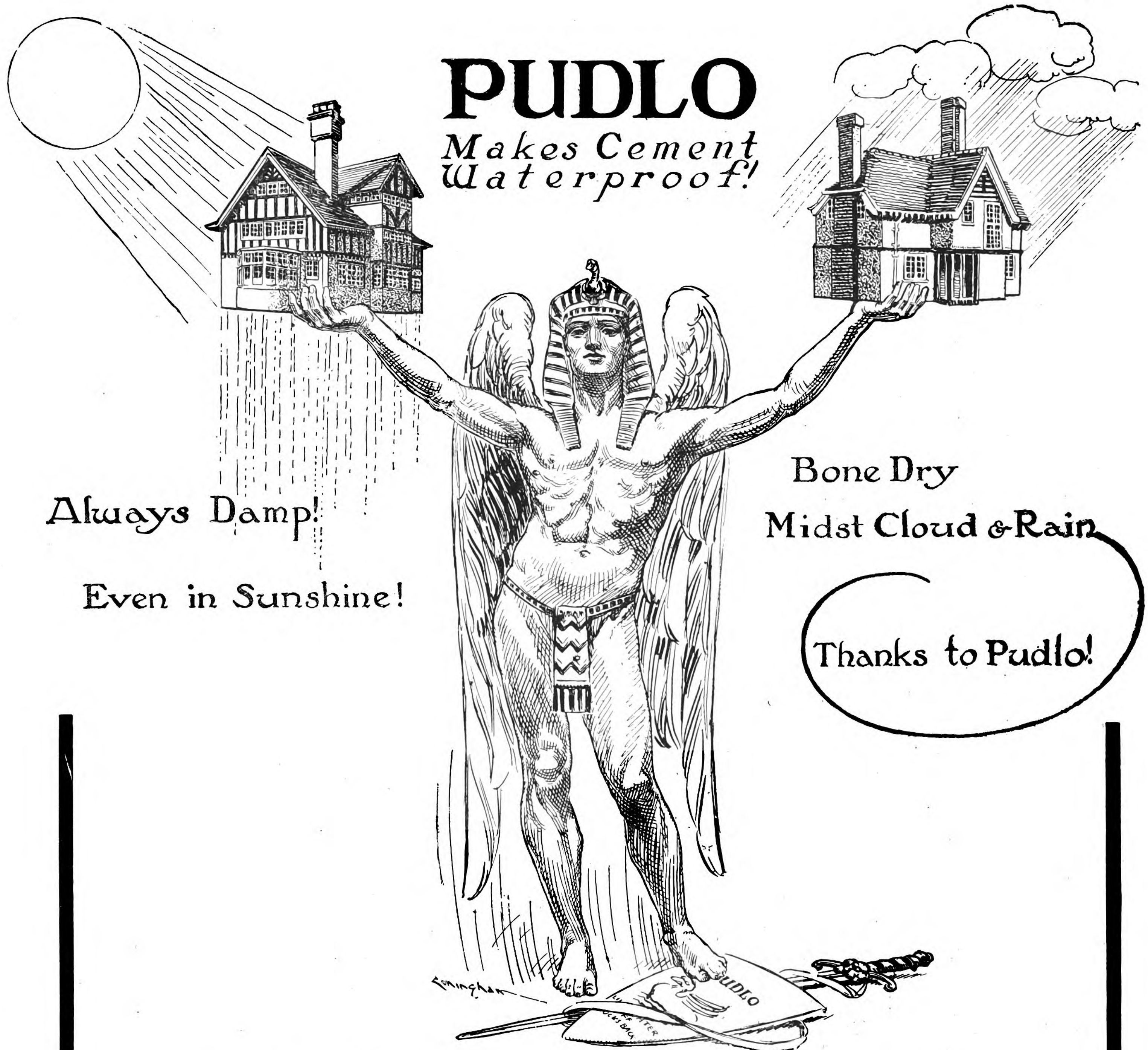
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NOTES OF THE MONTH.

Some Notes on Chequers Court.

Concerning the changes that have been wrought from time to time at Chequers Court, recently given to the nation as a permanent country residence for the Prime Ministers of England, Sir Arthur Lee has written to the Press the following generous tribute to his predecessors in the occupancy, and to those by whom he has been assisted in careful restorations: "So much has been written about Chequers and the architectural vicissitudes through which it has passed in the course of the last hundred years, that I fear less than justice has been done to my predecessors there. The gothicizing of the exterior and interior of the house, which took place in late Georgian times, has been rightly condemned on both archæological and architectural grounds; but it was universally admired at the time, and was, I am convinced, carried out with the most reverent and pious intentions. Nearly a century later the task of purifying William Hawtrey's house of these disfiguring accretions was commenced by Mrs. Frankland-Russell-Astley and her son, the exterior stucco was removed, and a careful restoration was contemplated and commenced under the skilled direction of Mr. Reginald Blomfield, R.A. For various reasons this project had to lapse until it became my privilege to carry it through, on a more complete scale, in 1909 and succeeding years. With the full approval of the late owners, I again called in Mr. Blomfield to advise on all architectural matters, whilst the laying out of the gardens was undertaken by Mr. H. Avray Tipping. To these two distinguished authorities the credit for the recovery by Chequers of its Elizabethan character and environment is primarily due. I am anxious to make these facts known, as some of the published comments have, I fear, been calculated to wound the feelings of some of those who still live, and who loved and cared for the house in the past."

* * *

The Lincoln Statues.

In the House of Commons recently, Sir A. Mond (First Commissioner of Works), replying to Mr. Butcher, said it had not been the custom in the past for the First Commissioner of Works to enter into formal consultation with any body of experts as to the artistic merits of any one statue to be erected on Crown property, nor did he know how any such body could effectively consider the wide divergence of views which existed in all matters of art. "I now understand," said the First Commissioner, "that the American Committee for the celebration of one hundred years of peace are anxious to send a replica of the statue of President Lincoln recently erected at Cincinnati and executed by Mr. George Gray Barnard, a sculptor of the highest standing, which they consider to be a superior monument to St. Gaudens's statue, and I do not consider that I should interfere with the selection made by the donors, who, I understand, comprise men of well-known artistic standing." Mr. Butcher: "Has the right hon. gentleman had an opportunity of seeing either of these statues, or has he got any report upon their artistic or other merits?" Sir A. Mond: "I have seen reproductions of the statues, but I have not had an opportunity of seeing the statues themselves. I have had various accounts of their merits, and opinions differ, some preferring one and some the other." Mr. King suggested that an opportunity should be given to the House of Commons, and to recognized authorities on civic art, to make suggestions before any statue offered by any private persons was accepted for erection in London. Sir Alfred Mond replied that he did not consider that this suggestion was at all practical. In the name of common sense, why not? Quite obviously this is the only practical and businesslike course to take. It is consulting the persons who know, and is every whit as practical as consulting a doctor or a lawyer on their respective subjects of special knowledge. It cannot be supposed that, since the remote days of Mr. Acton Smee Ayrton, any First Commissioner would, with self-sufficient complacency, dispense with competent advice on such matters. Doubtless, Sir A. Mond has consulted expert opinion in this matter of the statues. If he has not, the neglect of so elementary a precaution is inexcusable; if he has, then there is no sufficient reason for refusing to extend the principle. In any case, it is distinctly unfortunate that this controversy should have arisen. The best way out of the difficulty is to prevail upon our American cousins to send us both statues: though upon us would then devolve the somewhat invidious duty of deciding which should have pride of place in Parliament Square.

* * *

Architects and Air Raids.

Mr. Sydney Perks, Surveyor to the Corporation of the City of London, has sent the following letter to the editor of the R.I.B.A. Journal: "Sir,—At a meeting at the Mansion House it was decided that the occupiers of certain buildings in the City should be asked to exhibit notices stating that the public could take refuge there. It was necessary to make a survey of the whole City as quickly as possible, and I should like to acknowledge in our Journal the prompt and valuable assistance so kindly given by Messrs. Aickman, Max Clarke, Cross, Davidge, Gosling, Goldsmith, Hornblower, Lanchester, Marks, Martin Saunders, Shepherd, Stevens, Surrey, Lewis Solomon, Stenning, Tubbs, and Wigglesworth. Yours obediently, Sydney Perks, City Surveyor." The excellent example set by the City Corporation might well be followed by other municipal authorities whose towns are at all likely to be attacked. It is a matter in which architects and surveyors are the persons best qualified to render effective service, whether they act upon intimate local knowledge, or whether they depend upon the instant judgment possible only to the trained eye; which things, being perfectly obvious, are therefore the more likely to be overlooked. To overlook the architect is, indeed, an inveterate national custom, and we are glad to record this gratifying instance to the contrary.

* * *

A Famous Seventeenth-century Bedstead.

A famous state bedstead from Boughton House, Northamptonshire, recently presented to the Victoria and Albert Museum by the Duke of Buccleuch, has been placed on exhibition in the Woodwork Galleries of the Museum (Room 54). The bedstead, with hangings and upholstery of crimson Italian brocade enriched with gold fringes and ostrich plumes, is a typical example of the magnificent bedsteads which were made in England for royal palaces and noblemen's houses in the latter part of the seventeenth century. Boughton House was rebuilt during that period by Ralph, Duke of Montagu, who was ambassador to the court of France at the time of Louis XIV. The decoration and furnishing of the House were completed by 1694, when William III and his court visited Boughton, and it was for this occasion that the bedstead is said to have been made.

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NOTES OF THE MONTH.

A Note on London Statues.

In a topical discourse under "Here and There," in a recent issue of "The Architects' and Builders' Journal," "Diogenes" says: "We all hope that ere long he (Canning) will have, in his little oasis of verdure in Westminster, as a companion of his statuesque solitude, St. Gaudens's statue of Abraham Lincoln. They will enjoy each other's society; for both hated tyranny and loved a joke, and both were kindly natured men. Year after year I have noticed that the sparrows have made a nest under Canning's right arm, and I was glad to see that it was not disturbed. I can fancy that Canning's shade enjoys the sight. With their passion for tidiness, and with that craze for cleanliness which Mr. Will Crooks once said was the most depressing attribute of workhouses, the Dutch would have ruthlessly swept the nest away, and the act would have been as sinful as the refusal of hospitality to the birds who would build in the stackpipes on churches. Seeing those wirework cages designed to keep out birds, the gentle St. Francis would achieve his nearest approach to a frown, unless he chanced to reflect that his feathered friends were really being protected from the 'billowy grave' that ended the career of the hero of 'Titwillow.' Not but what an occasional cleansing of our statues (which seems to be nobody's business in London) would be beneficial. Sir Henry Irving's delicate lineaments, in the Charing Cross statue, are encased in a mask of soot, as if he had newly made up for Othello: 'Haply for I am black——' More than that: the statue rather illustrates an observation I once heard the late Canon Barnett make about the excessive thoroughness of a certain lady: 'If she were going to play Othello, she would blacken herself all over.' Although the Charing Cross statue of Irving is, on the whole, rather fortunate in its site—it is in the heart of Theatreland, and the statue has a comprehensive view of the booksellers' shops the scholarly actor loved to haunt in his hours of leisure, going into them with the intention of spending five pounds and coming away with a receipt for fifty—it is not well lighted, and that may partly account for the negroid appearance which is so flagrant a contradiction of Irving's habitual pallor. But I, for one, hope that it will never be removed, unless Time, the great scene-shifter, removes the booksellers and the theatres from Charing Cross. Statues are notoriously peripatetic; but it were pity to see the great tragedian resume his earlier character of 'walking gentleman.' It is odd that the district should hold one of the best of the several statues of Irving, and (in Leicester Square) the worst possible statue of Shakespeare. But if statues are put up in the reasonable expectation that sooner or later they will be removed elsewhere, why not provide them with chariot wheels—or at least castors!"

* * *

National Housing Scheme: Government Intentions.

The Government has decided that the new national housing scheme shall be controlled and directed by the Local Government Board. The returns and reports already received from the city, borough, town, and district councils throughout the country show that about 100,000 new workmen's dwellings are urgently required, but it can be stated that from 150,000 to 200,000 will be erected to meet the after-war conditions. It has been intimated at the Local Government Board that the Government will be asked to make a grant of a subsidy of several million pounds for the erection of the houses, but this subsidy will be purely a temporary measure to meet the

[*Continued on page* xxii

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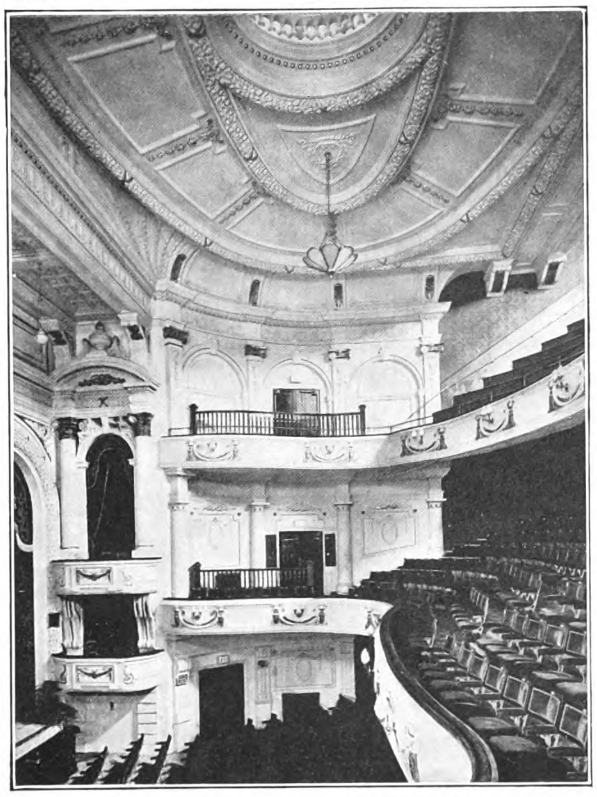

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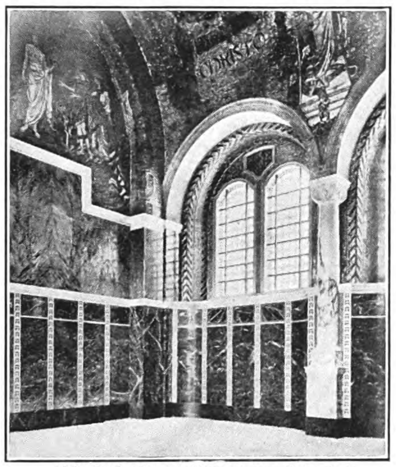

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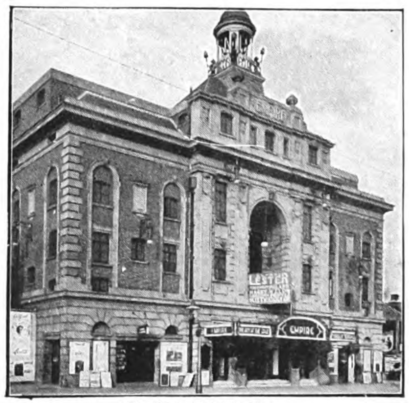

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* * *

Architectural Association Bureau and Drawing Office.

Mr. F. R. Yerbury, Secretary of the Architectural Association, writes as follows: "Some time ago you were good enough to give publicity in your columns to the Association's scheme for assisting members of the architectural profession on their discharge from the army. One of the proposals outlined was the establishment of a drawing office, in which men upon their discharge would find employment until such time as they could obtain permanent work, and in which an opportunity would be afforded to those not physically fit to take up employment elsewhere, of working under circumstances specially arranged to meet their requirements. I am now writing to inform you that the drawing office is established, and whilst fully aware that work in the architectural profession is scarce at the present time, I shall be very grateful to any architect who can send work to the office to be done. Any type of drawing can be undertaken, and assistants can be sent out to architects' offices for temporary work. I am sure the office will commend itself to the profession, and its existence has only to be known to ensure its receiving sufficient support to make it a success. I would also draw attention to the fact that the Architectural Association Bureau is most anxious to help any member of the profession, being discharged from the army, in matters connected with his return to civil life, and that special arrangements are being made in the schools to re-train and assist those whose military service has rendered this necessary."

* * *

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Owing to the scarcity of metals, the necessity frequently arises of finding substitutes for use on work which cannot be delayed. As a temporary measure, the dome of the National Museum of Wales, at Cardiff, has been made watertight with a rendering of waterproofed cement. When the War is over it will be covered with lead as originally intended. The architects (Messrs. Smith and Brewer) state that the Pudloed cement rendering has proved quite satisfactory.

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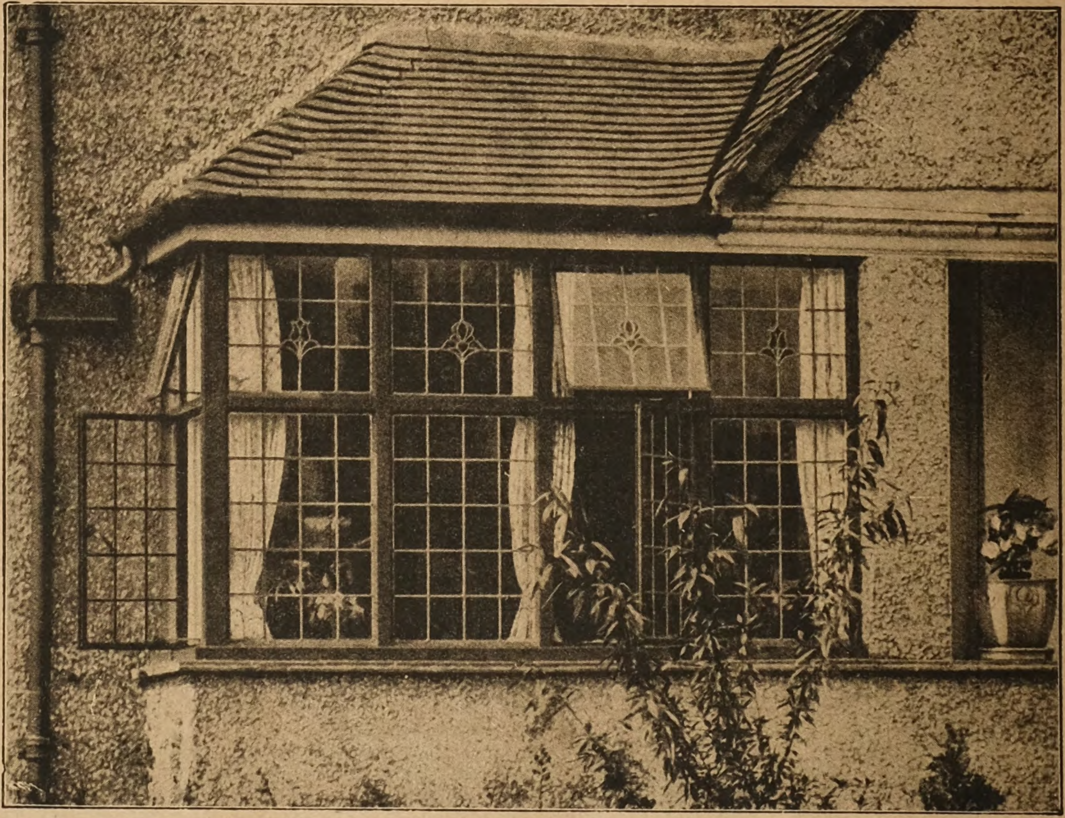

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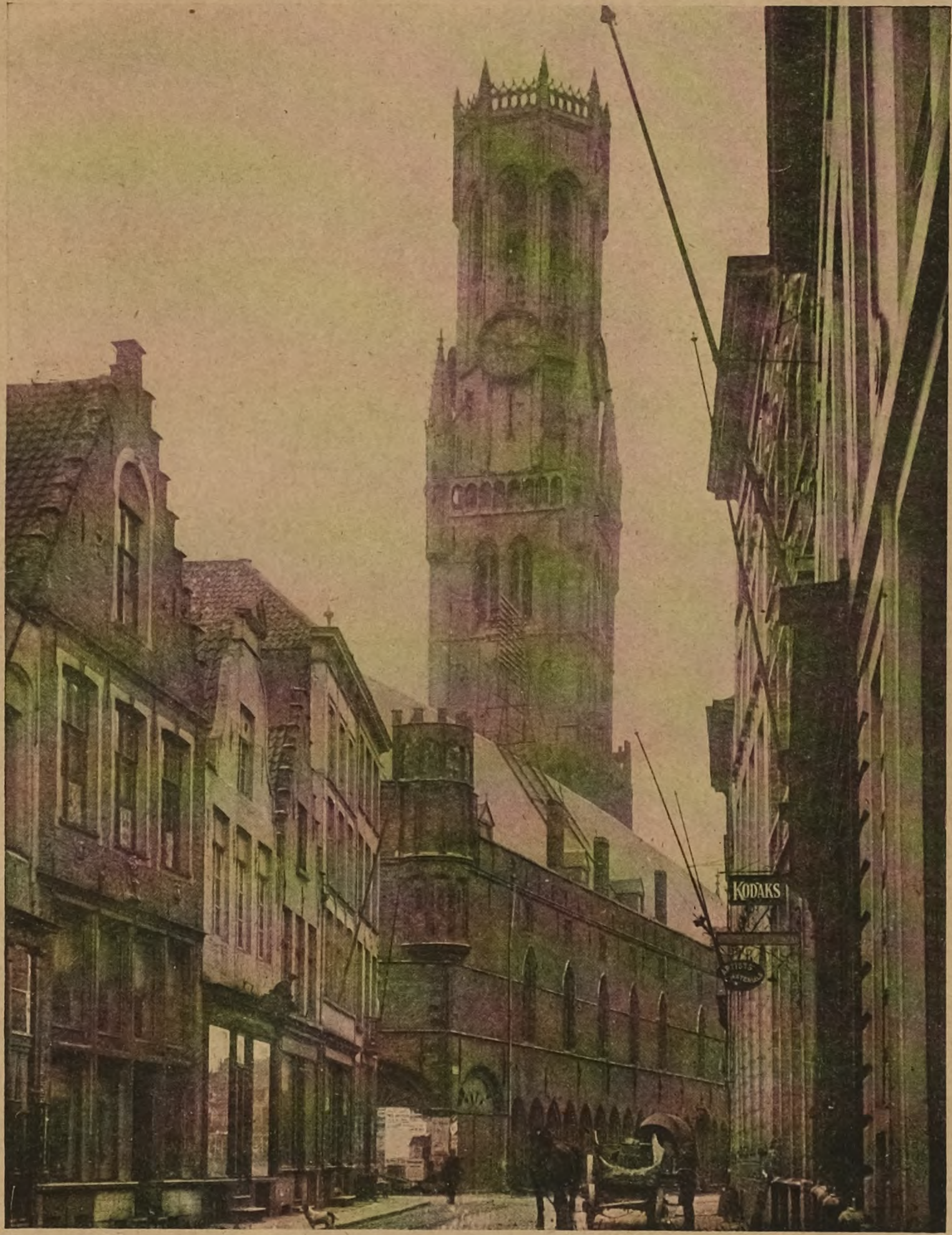

The Belfry, Bruges, from the Rue aux Laines.

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